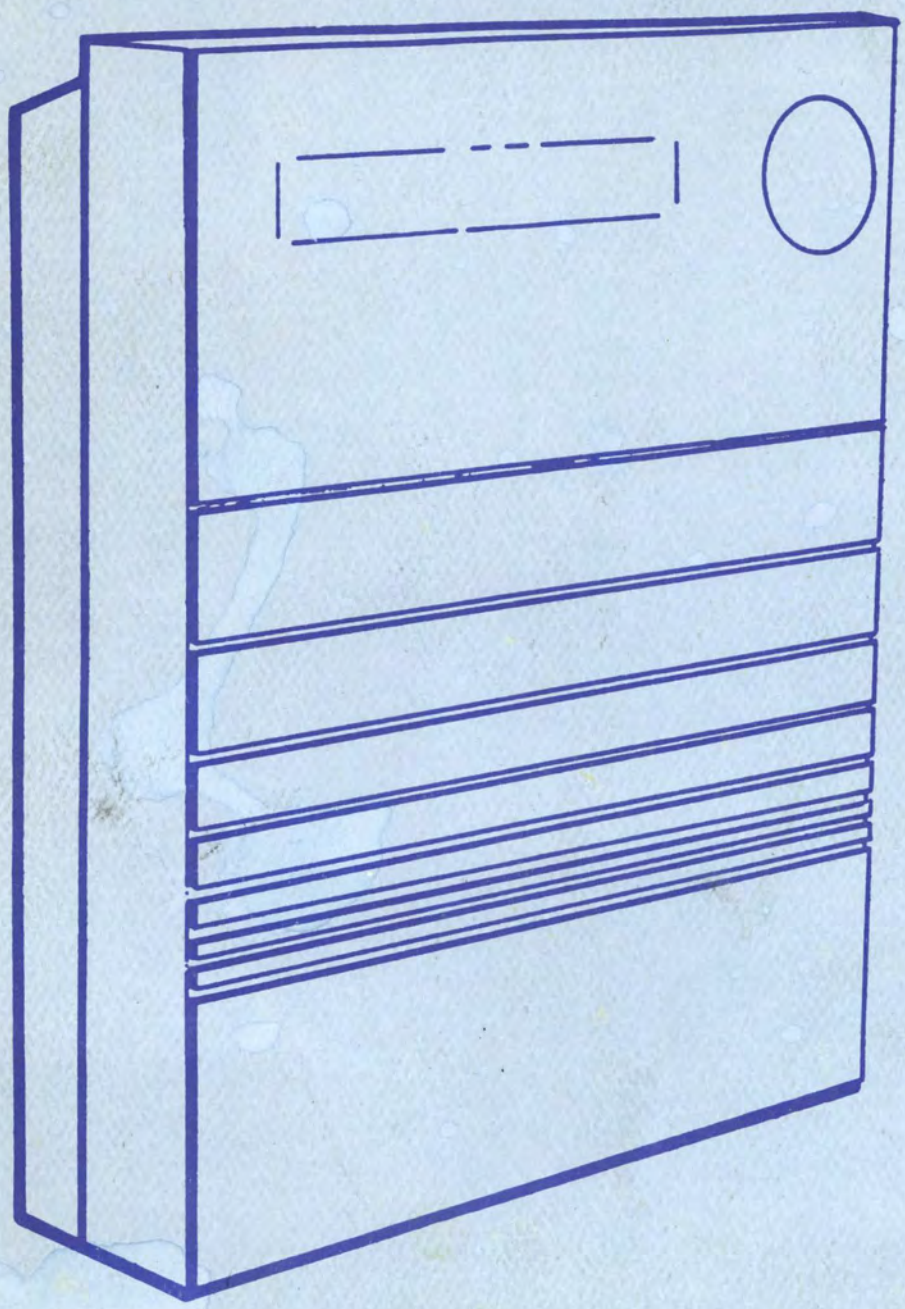


Series II

MASTERVOICE

OWNER'S GUIDE

AUTOMATED VOICE SYSTEMS INC.
WARNING: Tampering Voids Warranty
PRODUCT P. I. N. # ZFRG
MODEL NO.
SERIAL NO. I-02275-S2-2498

!! STOP !!

PLEASE READ THIS IMPORTANT MESSAGE

Your home automation system and components have been thoroughly tested and inspected to provide satisfactory performance. Nevertheless, we must alert you to the fact that **CARELESS REMOTE CONTROL** of appliances and lights could cause circumstantial mishaps, which in no way reflect upon AVSI products.

The following are examples of mishaps that could occur:

* If an automatic coffeemaker doesn't contain any water when it's turned on remotely, it could overheat and be damaged.

* An electric heater with clothing draped over it could cause a fire when it's turned on remotely.

* An electric fan with poorly protected blades could injure someone that is standing too close to the fan when it's remotely engaged.

Therefore, we cannot emphasize too strongly the importance of properly setting up ALL remotely controlled devices or appliances to avoid a potential problem situation.

Your AVSI home automation system will provide you with great convenience, comfort and pleasure, but we urge you to take sensible safety precautions as you enjoy its many unique functions.

KEEP OUT OF REACH OF CHILDREN

For U.S.A.

WARNING: TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK. DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

Explanation of Graphical Symbols
The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

AVSI
LIMITED WARRANTY FOR THE SERIES II HOME AUTOMATION SYSTEM

Terms of Limited Warranty

Once you take possession of your AVSI product after purchase from AVSI or an authorized AVSI reseller, AVSI warrants the product to be in good working order for a period of one year (365 days) from the date of purchase. If your AVSI product is shipped to you by AVSI or by an authorized AVSI reseller, AVSI warrants the product to be in good working order for a period of one year (365 days), beginning five (5) days after the shipment date of the product.

What AVSI Will Do

During the applicable warranty period, AVSI (during its normal business hours) will maintain the product in good working order in accordance with its policies pertaining to maintenance equipment. This limited warranty extends only to the original purchaser of the product. If the product fails to be in good working order at any time during the applicable limited warranty period, AVSI will, at its option, either repair or replace the product at no additional charge, except as set forth below. Repair parts and replacement products will be furnished on an exchange basis and will be either new or reconditioned. All replaced parts shall become the property of AVSI.

What AVSI Will Not Do

This limited warranty does not extend to damage of the product resulting from misuse, abuse, accident, disaster or modification not done by AVSI .

Except as set forth in the Warranty Agreement, AVSI makes no express warranties as to any matter whatsoever, including without limitation, the condition of the equipment, its merchantability, or its fitness for any particular purpose. AVSI does not represent or warrant that the Intrusion Detection System may not be compromised or circumvented; or that the system will prevent any loss by burglary, hold-up, fire or otherwise; or that the system will in all cases, provide the protection for which it's installed. This warranty does not cover any damage to material or equipment caused by accident, misuse, attempted unauthorized repair service, improper installation or modification by anyone other than AVSI, AVSI shall not be liable for consequential damages.

BUYER ACKNOWLEDGES:

That any affirmation, fact or promise made by AVSI shall not be deemed to create an express warranty; that Buyer is not relying on the skill or judgment of AVSI in selecting or furnishing a system suitable for any particular purpose; and that there are no warranties which extend beyond those stated in the Warranty Agreement hereof. Buyer acknowledges that Buyer has read and understands all of this Agreement.

AVSI Is Not An Insurer: LIQUIDATED DAMAGES

It is understood and agreed: That **AVSI is not an insurer**; that insurance, if any, shall be obtained by Buyer; that payments provided herein are based solely upon the value of the System and are unrelated to the value of Buyer's property or the property of others located on Buyer's premises. Buyer acknowledges that it's impractical and extremely difficult to fix the actual damages, if any, which may result from a failure to perform any of the obligations herein, or the failure of the System to properly operate with resulting loss to Buyer because of, but not limited to:

* The uncertain amount or value of Buyer's property or the property of others kept on the premises which may be lost, stolen, destroyed, damaged, or otherwise affected by occurrences which the System is designed to detect or avert.

* The uncertainty of the response time of any police or fire department, should the police or fire department be dispatched as a result of a signal being received or an audible device sounding.

* The inability to ascertain what portion, if any, of any loss would be caused by failure to perform on the part of AVSI or its equipment to operate.

Limitation of Remedy

If your product is not in good working order as warranted during the one year (365 day) limited warranty period or the 365 day warranty period, whichever applies, your sole remedy shall be repair or replacement as provided above. In no event will AVSI be liable for any incidental or consequential damages arising out of the use of, or inability to use such product, or for any claim by any other party, even if AVSI has been advised of the possibility of such damage or claim. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

All expressed and implied warranties of this product, including the warranties of merchantability and fitness for a particular purpose, are limited in duration to a period of one year (365 days) from the date of purchase, or 365 days from the date of shipment, as described above. No warranties, either expressed or implied, will apply after the applicable limited warranty period. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. This warranty gives you specific legal rights and you may have other rights which vary from state to state.

How to Obtain Limited Warranty Service

Limited warranty service may be obtained during the applicable limited warranty period by delivering or sending your product to an authorized Service Center. If you want to send your product for repair, you must first obtain a return authorization number from an authorized Service Center. **No product will be accepted for repair without a Return Material Authorization (R.M.A.) number**. When you send your product to a Service Center by mail or carrier, you must prepay the shipping charges. You must also either insure the product or assume the risk of loss or damage in transit. Additional warranty service options may be available in your area.

To obtain your return authorization number or request any additional information about your product or this limited warranty, please call the AVSI SERVICE CENTER at (714) 524-4488 .

********** ABOUT THIS OWNER'S GUIDE **********

Sections 1 through 11 of the Owner's Guide provide the operator with information needed to properly unpack, set up, install, and operate the Series II home automation system.

The complex operating, advanced instructions and interfacing features given in Sections 12 and 13 are intended for people who have mastered the basic system operations and also for hardware and software host system design personnel. These technical sections inform interface design personnel how to properly integrate your Series II home automation system with an optional host system.

Sections 14 and 15 cover care of your Series II home automation system, operator troubleshooting, cleaning, and additional accessories.

********** PREFACE **********

The Owner's Guide represents the product as manufactured at the time of publication. AVSI reserves the right to make changes and/or improvements to its products without incurring any obligation to incorporate such changes or improvements in units previously sold or shipped.

********** AGENCY LISTINGS **********

UL Listed Under File No. E104022
FCC Class Part 15B
FCC Part 68 Limits;
FDA No. 2027471
CSA Listec Under File No. LR 61924
DOC Regulations CS-03;

PATENTED UNDER THE FOLLOWING

#5,068,900 & #5,003,603

EDITION 2.02-S2
February 10,1995
11174+

TABLE OF CONTENTS

SECTION 1 - INTRODUCTION 1
1.1 THIS IS THE SERIES II HOME AUTOMATION SYSTEM 2
1.2 WHAT THE SERIES II HOME AUTOMATION SYSTEM DOES 2

SECTION 2 - UNPACKING 3
2.1 UNPACKING THE UNIT AND ACCESSORIES 5
2.2 SAVING THE SHIPPING MATERIALS 5

SECTION 3 - FAMILIARIZATION 7
3.1 SERIES II FEATURES (FRONT) 8
3.2 FEATURES OF THE SERIES II HOME AUTOMATION SYSTEM (BACK) 9
3.3 ACCESSORIES 10

SECTION 4 - PLACEMENT AND SAFETY 13
4.1 PLACEMENT OF UNIT 14
4.2 SAFETY PRECAUTIONS 14

SECTION 5 - CONTROL PANEL OPERATIONS 17
5.1 PHONE CONNECTION 19
5.2 APPLYING POWER 20
5.3 INSTALLING BATTERY BACKUP 20

SECTION 6 - SETTING UP UNIT 23
6.1 DISPLAY PANEL 25
6.2 KEYBOARD 25
6.3 VOLUME CONTROL 27
6.4 SENSITIVITY CONTROL 27

SECTION 7 - PREPARING FOR OPERATION 29
7.1 ENTERING P.I.N. 30
7.2 SYSTEM TEST 30
7.3 SETUP FORMS 31
7.4 DEFAULT SETTINGS 31

SECTION 8 - SETTING MODULES 33
8.1 INTRODUCTION 35
8.2 SETTING UP LAMPS 35
8.3 SETTING UP APPLIANCES 35
8.4 SETTING UP WALL SWITCHES OR RECEPTACLES 36

SECTION 9 - SETTING UP THE SYSTEM 39
9.1 QUICK SETUP 40
9.2 SETTING UP CLOCK 40
9.3 SETTING UP DISPLAY LEVEL 41
9.4 SETTING UP DEVICES (OPTIONAL) 42
9.5 DIM FACTOR 44
9.6 SETTING UP TELEPHONE 45
9.6.1 PULSE OR TONE DIALING 45
9.6.2 STORING TELEPHONE NUMBERS 45
9.7 SETTING BAUD RATE 47
9.8 SETTING HOUSE CODES 47
9.9 12 OR 24 HOUR DISPLAY MODE 48
9.10 SET ACTIVATE 48
9.11 SET TIME-OUT 49
9.12 VOICE CONTROL PASSWORD 49
9.13 RS-232 (MODEM) ACCESS PASSWORD 50
9.14 SET CATCH UP TIME 50
9.15 SET DAYLIGHT SAVINGS TIME 51

9.16 MANUAL DAYLIGHT SAVINGS TIME 51
9.17 SETUP LOCATION FOR SUNRISE AND SUNSET 51

SECTION 10 - TEACHING THE SERIES II HOME AUTOMATION SYSTEM 53
10.1 OVERVIEW 54
10.2 LEARNING PASSES (OPTIONAL) 56
10.3 MICROPHONE CHECK (REQUIRED) 57
10.4 SET FOCUS (OPTIONAL) 58
10.5 SPEAKER ADAPTION (REQUIRED) 59
10.6 DELETE A USER (OPTIONAL) 59
10.7 TEACH SECTION (REQUIRED) 60
10.8 CHECK AND LEARN (REQUIRED) 62
10.9 SET CHECK AND LEARN (OPTIONAL) 63
10.10 DIALOGUE CHECK (OPTIONAL) 64
10.11 USER CHECK (OPTIONAL) 64
10.12 CHANGE A WORD (OPTIONAL) 65
10.13 DELETE A WORD (OPTIONAL) 65
10.14 SETTING USER NAMES (OPTIONAL) 66
10.15 ENTRY SECURITY (OPTIONAL) 66
10.16 SHORT FORM (OPTIONAL) 66
10.17 AUTO UPDATE (OPTIONAL) 67
10.18 FAST ANSWER (OPTIONAL) 67

SECTION 11 - OPERATIONS 69
11.1 VOICE CONTROL 70
11.1.1 ALARM 72
11.1.2 RECEIVING/PLACING PHONE CALLS 72
11.1.3 SHORT FORM (OPTIONAL) 73
11.1.4 AUTO CORRECTION 74
11.2 MANUAL CONTROL 74
11.3 PHONE DIALER 76
11.4 R.T.A. (REMOTE TELEPHONE ACCESS) 77

SECTION 12 - SPECIAL OPTIONS 81
12.1 SETTING UP TIMERS 82
12.2 SETTING UP MACROS (OPTIONAL) 87
12.3 SETTING UP HOLIDAY SCHEDULE 88
12.4 SETTING UP ALARM 88
12.5 SETTING UP ALPHA DISPLAYS 91
12.6 VOICE RESPONSES 92
12.7 RESPONSE-TYPE 93
12.8 CHECK A WORD 93
12.9 RECEIVE COMPUTER COMMANDS 94
12.10 RS-232 REMOTE UPLOAD/DOWNLOAD INITIATION 95
12.11 MRTA MODEM 95
12.11 X-10 RECEIVE 96
12.12 ENERGY EYE 96
12.13 RING DEVICE 97

SECTION 13 - INTERFACE REFERENCES 99
13.1 MICROPHONE JACK 100
13.2 SPEAKER JACK 100
13.3 RS-232 PORT 101
13.4 AUXILIARY PARALLEL PORTS 102
13.5 SAVING MEMORY 102
13.6 RESTORING MEMORY 103
13.7 SPECIFICATIONS 104

SECTION 14 - SOLVING PROBLEMS 105
14.1 CARE AND MAINTENANCE 106
14.2 TROUBLESHOOTING 106
14.3 SYSTEM RESET 109

SECTION 15 - RELATED INFORMATION 111
15.1 WHO TO CONTACT 112
15.2 GLOSSARY OF TERMS 112
15.3 ACCESSORIES 113
15.4 ORDERING INSTRUCTIONS 115

THIS PAGE

INTENTIONALLY

LEFT BLANK

SECTION 1 - INTRODUCTION

Contents

1.1 THIS IS THE SERIES II HOME AUTOMATION SYSTEM 2
1.2 WHAT THE SERIES II HOME AUTOMATION SYSTEM DOES 2

1.1 THIS IS THE SERIES II HOME AUTOMATION SYSTEM

Congratulations! You have just purchased the Series II home automation system home automation system from AVSI the most technically advanced system of its kind. We know you are eager to use your new Series II home automation system immediately, but please take the time necessary to read this Owner's Guide before you try to operate your unit. This Guide contains everything you need to know to operate the unit properly. The sequence of sections is designed to instruct you in the most logical order for you to easily and rapidly learn how to put your new Series II home automation system to work. The Series II home automation system is unlike any computer, appliance or other electronic device you have ever owned; therefore, again, we strongly recommend that you **READ THIS OWNER'S GUIDE** before you start experimenting with your new Series II home automation system.

1.2 WHAT THE SERIES II HOME AUTOMATION SYSTEM DOES

The Series II home automation system from AVSI gives you complete control of up to 256 devices in your home by 4 basic modes of operation:

Control by Voice (Voice Control) - This is the most glamorous and amazing method of operation, whereby the Series II home automation system will actually recognize your spoken words, respond to you in a "Human Perfect" voice and carry out your verbal requests.

Control by Touch (Manual Control) - By using the command keys on the hidden keyboard or any touch tone telephone, you can operate lamps, appliances and other electronic devices. You can also place and receive phone calls, using the keyboard.

Control by Time (Set Timers) - The Series II home automation system comes complete with a built-in SMART CLOCK that contains 99 timers. By SMART CLOCK, we mean that each timer can be individually programmed with its own start and stop dates. You can set each timer to come on only once or everyday at the time you choose. You can also choose which days of the week it's to function. If it's operating lamps or light fixtures, the Series II home automation system will not only turn it on, but will dim it to your desired intensity.

Control by Situation (Set Alarm) - The Series II home automation system can also send or receive commands through other methods of operation, including the built-in infrared sensor. In the Alarm Mode, the Series II home automation system can detect an intruder and then activate your lights, siren or perform other functions you may select.

SECTION 2 - UNPACKING

Contents

2.1 UNPACKING THE UNIT AND ACCESSORIES 5
2.2 SAVING THE SHIPPING MATERIALS 5

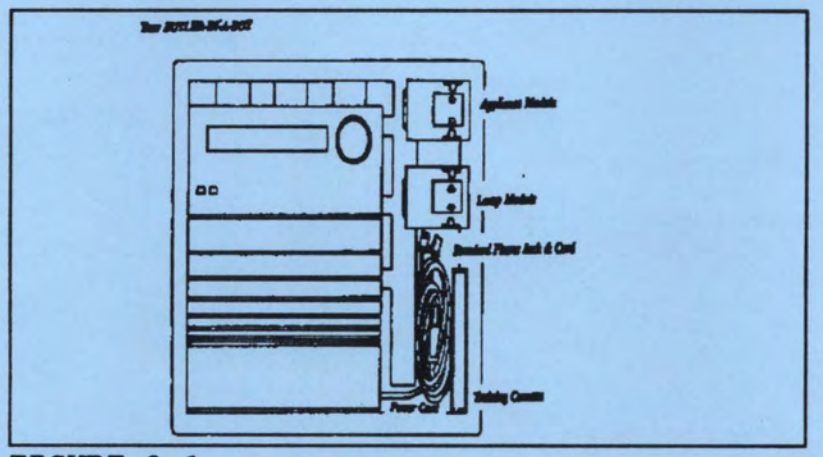
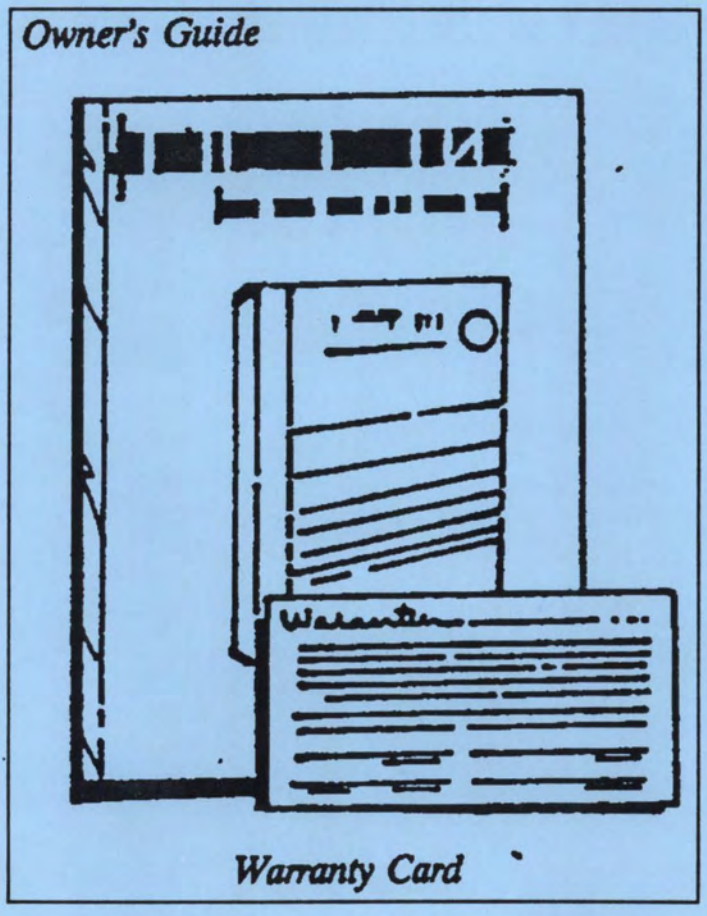


FIGURE 2-1



2.1 UNPACKING THE UNIT AND ACCESSORIES

Open the shipping carton carefully to prevent damage to the packing materials or the contents.

Inspect the shipping carton and the packing materials for any possible damage incurred during shipping. Immediately notify your dealer or shipping agent if you notice any damage.

Remove accessories from around the unit. The accessories include a phone cord, one lamp module, one appliance module, a warranty card.

Carefully lift the Series II home automation system out of its foam packing.

Remove protective plastic wrapping.

Inspect the Series II home automation system and all accessories for any possible damage during shipping. Immediately notify your dealer or shipping agent if you notice signs of damage.

Place your new Series II home automation system on a sturdy table or shelf away from direct sunlight, water, high humidity areas or heat-emitting appliances. (Refer to Section 4.1 for complete instructions about proper operating location.)

CAUTION: Do NOT operate the Series II home automation system in temperatures over 110 degrees F (40 degrees C) or below 50 degrees F (10 degrees C).

2.2 SAVING THE SHIPPING MATERIALS

After unpacking the Series II home automation system, be sure to save **ALL** of the **ORIGINAL SHIPPING MATERIALS**. If you have to return your unit for repair or replacement, it **MUST** be returned in the original shipping materials **or the warranty will not be honored**.

THIS PAGE

INTENTIONALLY

LEFT BLANK

SECTION 3 - FAMILIARIZATION

Contents

3.1 FEATURES OF THE SERIES II HOME AUTOMATION SYSTEM (FRONT) 9
3.2 FEATURES OF THE SERIES II HOME AUTOMATION SYSTEM (BACK) 9
3.3 ACCESSORIES 10

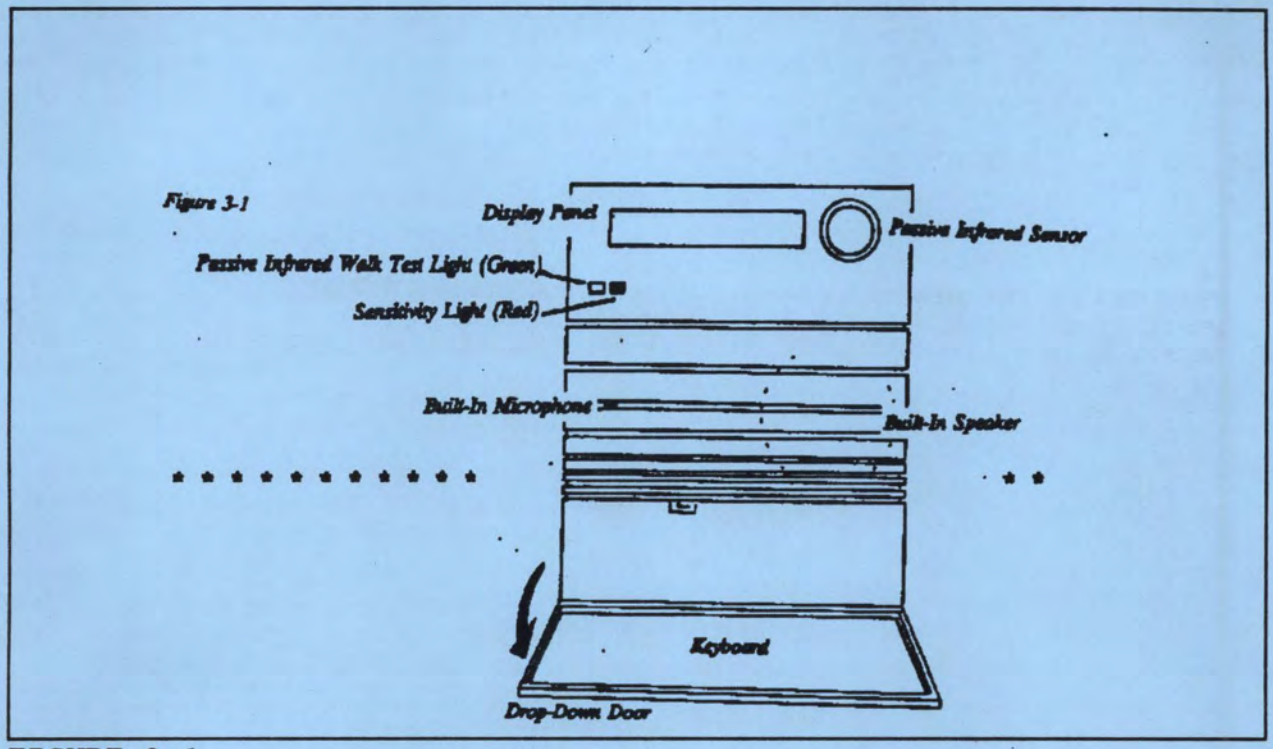


FIGURE 3-1

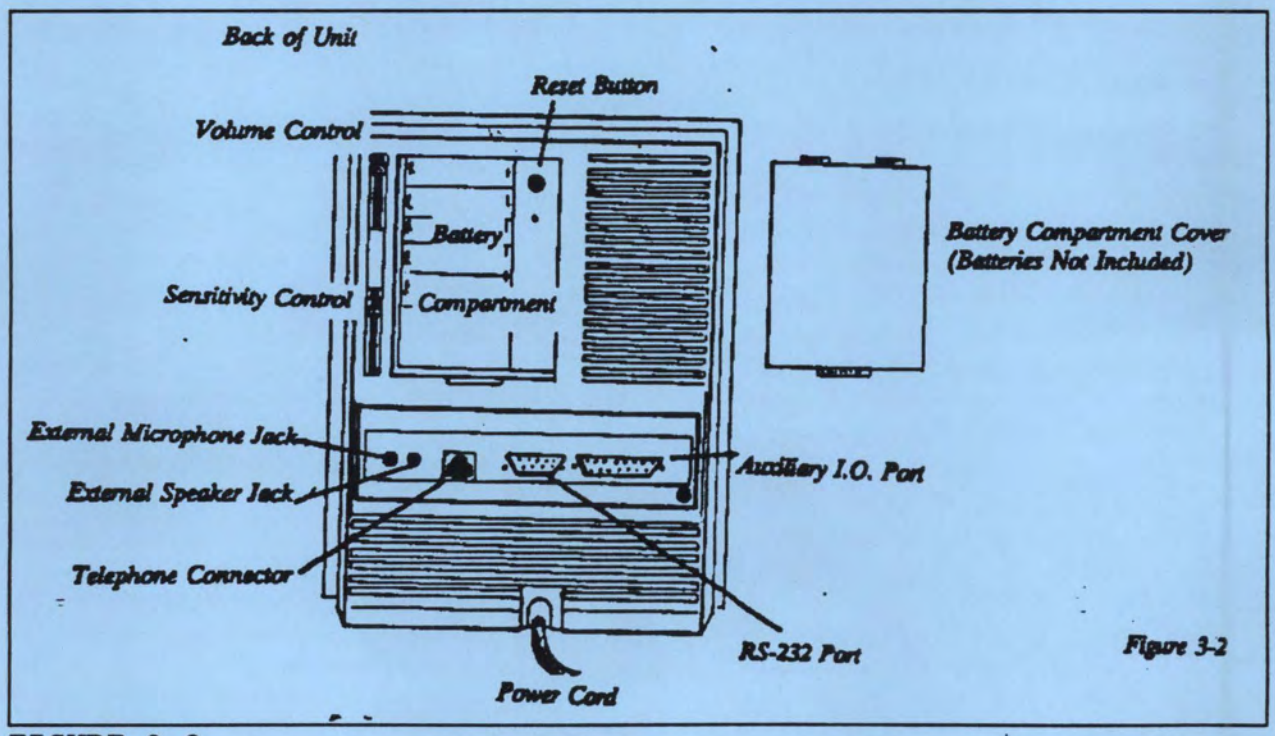


FIGURE 3-2

3.1 SERIES II FEATURES (FRONT)

This section identifies the various features on the front of the Series II home automation system (see Figure 3-1).

1. **DISPLAY PANEL** - This panel or "window," will give you information during the set up and the operation of your unit. It's a 16-character, alpha-numeric display and is designed to remain on 24 hours a day.

NOTE: WHEN YOU ARE IN THE VOICE CONTROL MODE OF YOUR SYSTEM, THIS DISPLAY WILL **PULSE** OR **BLINK SLIGHTLY**. THIS PULSING OR BLINKING IS **BY DESIGN** AND IS TO BE EXPECTED AS PART OF THE NORMAL OPERATION OF YOUR UNIT. THIS WILL BE FURTHER EXPLAINED IN SECTION 11.1 OF THIS OWNER'S GUIDE.

2. **PASSIVE INFRARED SENSOR** - This sensor -- the Series II home automation system's "eye" for detecting intruders -- has a maximum horizontal detection range of about 10 feet and a distance of 40 feet. When the alarm is armed and an intruder enters the detection zone, the Series II home automation system can turn on any device of your choice in an attempt to scare off an intruder (see Section 12.2 for complete information on setting up the intrusion detection system).

3. **SENSITIVITY LIGHT (RED)** - This red light monitors the noise level in the room. It also monitors your voice level and indicates if the Series II home automation system is "hearing" you properly (see Section 6.4).

4. **PASSIVE INFRARED WALK TEST LIGHT (GREEN)** - This green light monitors movement in the room. It also is used as a "walk" test light to indicate if the infrared sensor is working properly (see Section 12.2).

5. **BUILT-IN MICROPHONE** - This is the system's "ear," the feature that enables the Series II home automation system to "hear" your voice (see Section 6.4).

6. **BUILT-IN SPEAKER** - This is the system's "mouth," the feature that enables it to "speak" to you. It also is the speaker for the built-in telephone (see Section 6.3).

7. **DROP-DOWN DOOR** - This door drops down to expose the keyboard and lifts up out of the way when not in use.

8. **KEYBOARD** - This is the main control section for the Series II home automation system. All the set up information is entered into your unit through the keyboard (see Section 6.2).

3.2 FEATURES OF THE SERIES II HOME AUTOMATION SYSTEM (BACK)

This section identifies the various features on the back of the Series II home automation system (see Figure 3-2).

1. **VOLUME CONTROL** - This slide control on the top left, back corner of the box enables you to adjust the volume of the system's "voice" coming through the speaker (see Section 6.3).

2. **SENSITIVITY CONTROL** - This slide control in the center of the left side of the box enables you to adjust the system's capability to "listen" when you speak to it through it's microphone (see Section 6.4).

3. **BATTERY COMPARTMENT DOOR** - Covers the battery compartment.

4. **BATTERY COMPARTMENT** - This is the area where the battery backup is stored, where a data information sheet can be stored, and where the master reset button is located.

(a) Battery Area (seeSection 5.3).

(b) Master Reset Button (see Section 14.3).

5. **EXTERNAL MICROPHONE JACK** - This jack gives you the ability to use an external microphone (see Section 13.1).

6. **EXTERNAL SPEAKER JACK** - This jack gives you the ability to attach external speaker systems (see Section 13.2).

7. **TELEPHONE CONNECTOR** - With this feature you may connect the Series II home automation system to any standard telephone line (see Section 5.1).

8. **RS-232 PORT** - This port is used for interfacing to computer systems or other accessories (see Section 13.3).

9. **AUXILIARY I.O. PORT** - This is the enhancement port for use with auxiliary products such as the RAM PACK #7000 memory backup system (see Section 5.3).

3.3 ACCESSORIES

This section describes and identifies the location of the accessories delivered with the Series II home automation system (see Figure 3-3).

1. **PHONE CORD** - The interface between the Series II home automation system and any standard home telephone jack (see Section 5.1).

2. **LAMP MODULE** - This module gives you the ability to control a light in your home (see Section 8.2).

3. **APPLIANCE MODULE** - This module gives you the ability to control an appliance in your home (see Section 8.3).

4. **WARRANTY CARD** - To insure proper warranty coverage, please fill out and return this warranty card **now** (see Page ii).

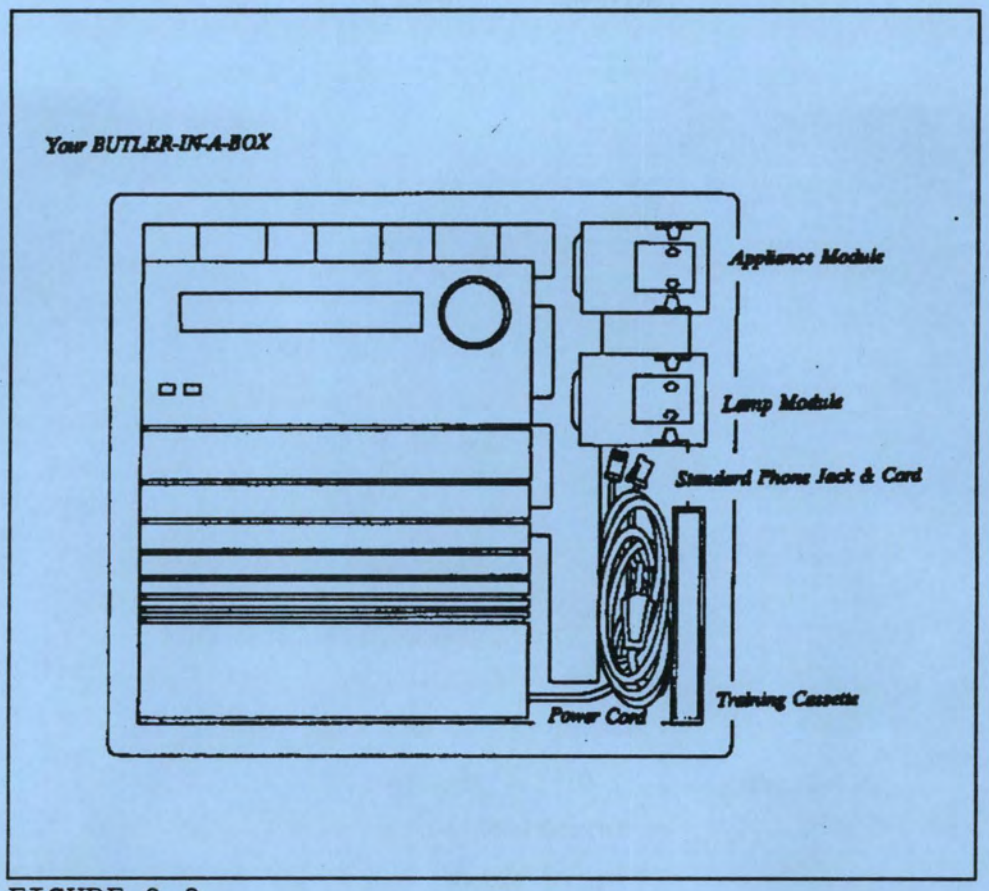

Your BUTLER-IN-A-BOX
Appliance Module
Lamp Module
Standard Phone Jack & Cord
Training Cassette
Power Cord

FIGURE 3-3

THIS PAGE

INTENTIONALLY

LEFT BLANK

SECTION 4 - PLACEMENT AND SAFETY

Contents

4.1 PLACEMENT OF UNIT 14
4.2 SAFETY PRECAUTIONS 14

***** PLACEMENT AND SAFETY *****

4.1 PLACEMENT OF UNIT

1. Place the Series II home automation system on a stable, vibration-free, level shelf, stand, table or other similar surface.

2. Do **NOT** place the Series II home automation system in locations where there is water or humidity, such as near a bathtub, wash basin, swimming pool, etc. Damp basements should be avoided as well.

3. Do **NOT** place the Series II home automation system in locations exposed to the direct rays of the sun. Direct sunlight through a window could warp the plastic case and damage the unit.

4. Do **NOT** place the Series II home automation system in locations where ventilation is obstructed, such as in a bookcase or between cabinets, or anywhere curtains or furniture may restrict ventilation.

5. Do **NOT** place the Series II home automation system near heat-emitting devices, such as a radiator, heat register, stove, fireplace, amplifiers, or any other heat-emitting equipment.

4.2 SAFETY PRECAUTIONS

The following are safety precautions you **MUST** observe:

1. Do **NOT** connect ANY electric or electronic device EXCEPT LAMPS to lamp modules. Appliances, television sets, stereos and other such units can be damaged if plugged into lamp modules.

2. Do **NOT** connect fluorescent lights to lamp modules. Fluorescent lights can be used with appliance modules **ONLY** and cannot be dimmed.

3. Do **NOT** exceed module ratings printed on the back of lamp and appliance modules, or on the front plate of wall switch modules. Check Volt (V), Watt (W) or Amp (A) ratings of lights and appliances before using with modules.

4. Lamp and appliance modules have polarized prongs (one tip is larger than the other) and must be used with polarized wall outlets **ONLY.**

5. Remove the appliance cord from the appliance module before servicing the appliance.

6. Turn off circuit breaker or fuse box before replacing the old wall switch or wall receptacle with the new wall module.

7. Do **NOT** use wall switch modules to control wall outlets or fluorescent fixtures.

8. Set the slide switch on the wall switch module to the **OFF** position before changing light bulbs.

9. Do **NOT** allow water or any foreign object to get inside the unit.

10. Do **NOT** place small metal objects or anything containing liquid on or near the unit.

11. Check the voltage rating of the Series II home automation system before connecting it to a power supply. Be sure to connect the unit **only** to the type of power supply indicated in the operating instructions (**see** Section 13.7), or as indicated on the unit itself.

12. Take care that the power cord is never bent sharply (especially near its connection to the unit or near the plug); that nothing is placed on it; or that it's not pinched or crushed. **NEVER** take hold of the plug or cord if your hand is wet, and always grasp the body of the plug when connecting or disconnecting it.

13. If the unit will not be used for a long period of time, disconnect the power cord.

14. **NEVER ATTEMPT REPAIRS YOURSELF**, including, but not limited to the following situations:

    (a) The power cord or plug is damaged.
    (b) A foreign object or liquid falls into the unit.
    (c) The unit is exposed to rain.
    (d) The unit does not function normally, or if operation shows an unusual change.
    (e) The unit has been dropped and the cabinet, or chassis, is damaged.

If any of these or similar conditions occur, unplug the power cord and consult with a qualified technician, the dealer from whom the unit was purchased or the nearest authorized Service Center.

DO NOT ATTEMPT ANY REPAIRS YOURSELF

THIS PAGE

INTENTIONALLY

LEFT BLANK

SECTION 5 - CONTROL PANEL OPERATIONS

Contents

		19
5.1	PHONE CONNECTION	20
5.2	APPLYING POWER	20
5.3	INSTALLING BATTERY BACKUP	

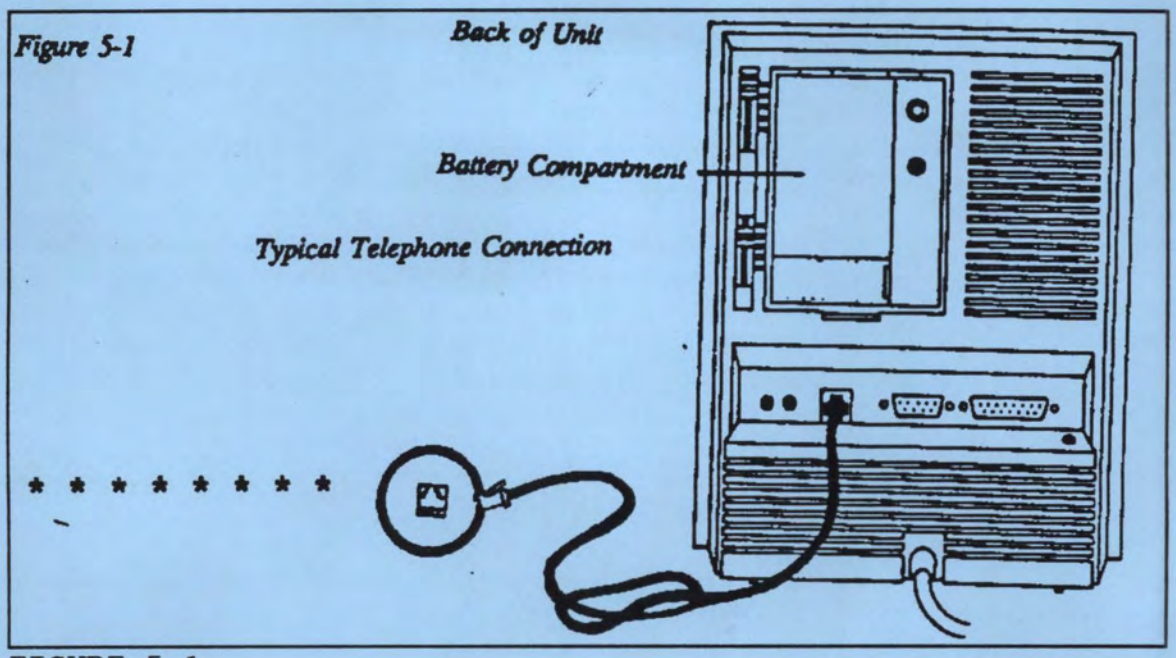


FIGURE 5-1

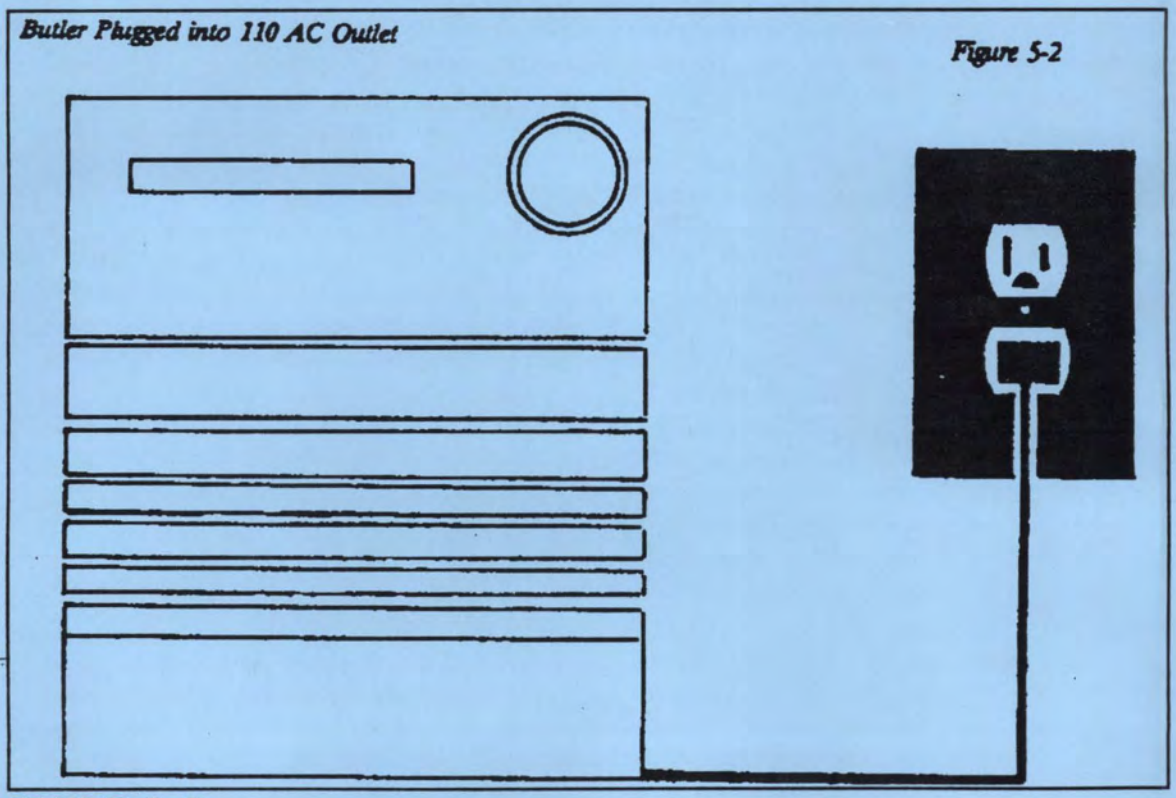


FIGURE 5-2

5.1 PHONE CONNECTION

Included in your start-up kit is a telephone line cord (Figure 5-1). Remove the cord and plug it into the phone jack (Figure 5-1) on the back of the Series II home automation system. Plug the opposite end of the cord into any standard home telephone wall jack. The Series II home automation system is a complete self-contained telephone, speakerphone and dialing system. The phone connections you have just made are the ONLY ONES NECESSARY to use the features described. The Series II home automation system has been registered with the Federal Communications Commission (FCC) and complies with Part 68 of the FCC rules. It's not approved for use with party lines or in place of coin activated telephones. A detailed description of the telephone features will be given later in this guide.

IMPORTANT NOTIFICATION PROCEDURES

The FCC requires that you notify the telephone company which provides service to the line being connected and inform them of the following:

1. The telephone number of the line to which you are connecting your unit.
2. The 14-digit FCC Registration Number and Ringer Equivalence Number (REN), both located on the bottom of your unit.

In the event your unit appears to malfunction, it should be disconnected from the telephone line until it can be determined if the unit is the source of the trouble. If it needs repair, do not reconnect it until such repairs are made.

Except for the telephone company provided ringers, all connections to the telephone network shall be made through standard plugs and telephone company provided jacks, or equivalent, in such a manner as to allow for easy, immediate disconnection of the terminal equipment. Standard jacks shall be so arranged that, if the plug connected thereto is withdrawn, no interference to the operation of the equipment at the customer's premises which remains connected to the telephone network shall occur by reason of such withdrawal.

INCIDENCE OF HARM OR CHANGE TO NETWORK

Under normal use, your unit should not cause harm to the telephone line. If such harm does occur, however, the telephone company will, where practical, notify you, the customer, that temporary discontinuance of service may be required. However, where prior notice is not practical, the telephone company may temporarily discontinue service forthwith, if such action is reasonable in the circumstances. In case of such temporary discontinuance, the telephone company is required to promptly notify you, the customer, of your right to bring a complaint to the FCC pursuant to the procedures set forth. Procedures for filing such complaints can be obtained from your dealer.

The telephone company may make changes in its communications facilities, equipment, operations or procedures, where such action is reasonably required in the operation of its business and is not inconsistent with the Rules and Regulations of the FCC. If such changes can be reasonably expected to render your unit incompatible with telephone company communications facilities, or require modification or alteration of your unit, or otherwise materially affect its use or performance, the telephone company is required to give you, the customer, adequate notice in writing. This gives you an opportunity to maintain uninterrupted service.

The REN is useful for determining the quantity of devices you may connect to your telephone line and still have all devices ring when your telephone number is called. In most areas, but not all, the total number of devices connected to one line should not exceed 5. To be certain of the number you may connect to your line, contact your local telephone company.

5.2 APPLYING POWER

The Series II home automation system has a power cord connected to the base of the unit. Plug the cord into any standard 110 AC outlet. Upon being plugged into the outlet (Figure 5-2), the unit will automatically switch from battery to AC operation if the battery has already been installed (Section 5.3). Once power has been applied to your unit, the display panel will show **BY AVSI, INC.** for approximately 16 seconds and then you will hear the Series II home automation system speak for the first time. It will say **"Hello."** Then **TEST PASSED OK** will appear on the display. Next, you will see **ENTER P.I.N.** Information about your P.I.N. (Product Identification Number) and the procedure for entering it are covered in detail in Section 7.1. **Do NOT jump to that section.** Please continue reading this section and all other sections in this Owner's Guide, **in order**. As stated at the beginning of the Guide, the sequence of sections is carefully designed to best inform you about your new Series II home automation system and to instruct you easily and rapidly in learning to operate it.

The above sequence of events will happen each time you plug in your unit until you've installed the battery backup. After the battery backup has been properly installed, should a power failure occur, your unit will always go back to the top of the menu (see Glossary) when power is restored. The menu will display **"OPERATIONS."** If you are in Voice Control operation at the time of a power failure, the unit will go back to displaying the current time of day when power returns (see Section 5.3).

IMPORTANT - ELECTRICAL GROUNDING INSTRUCTIONS

Your unit's power cord has a grounding plug with a grounding wire. The plug **MUST** be used in an outlet that is properly installed and grounded. Improper use of the cord can result in the risk of electric shock. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current.

WARNING: Improper use of the grounding plug can result in the risk of electric shock.

CONSULT A QUALIFIED ELECTRICIAN OR SERVICEMAN IF YOU DO NOT COMPLETELY UNDERSTAND THE GROUNDING INSTRUCTIONS OR IF YOU ARE NOT CERTAIN WHETHER THE UNIT IS PROPERLY GROUNDED.

A short power cord is provided to reduce the risk of anyone becoming entangled in it or tripping over it. Longer cord sets or extension cords are available and may be used if care is exercised.

The marked electrical rating of the cord set or extension cord should be at least as great as the electrical rating of the unit.

The extension cord must be a grounding-type 3-wire cord.

The longer cord should be arranged so that it will not drape over a countertop or tabletop where it can be pulled on by children or tripped over accidentally.

The electrical power cord must be kept dry and must not be pinched or crushed in any way.

5.3 INSTALLING BATTERY BACKUP

The Series II home automation system has an optional battery backup capability which will prevent loss of memory in the event of a power failure. To install the battery backup, please follow these steps:

1. Open the battery compartment cover as shown in Figure 5-1. Note the battery backup case is designed to hold five standard AA 1 1/2 volt batteries. **Alkaline or equivalent batteries should be used.**

2. Insert the batteries into the battery compartment according to the diagram, making sure proper polarity is maintained.

3. Replace the compartment cover.

BATTERY LIFE - The batteries will last and maintain memory for approximately three hours after a power failure. If extended battery time is desired, a large 6 volt battery may be installed in back of the unit by disconnecting the battery clip cable (currently attached to the battery case) and attaching it to the 6 volt battery. After a power failure, **the batteries should be replaced.** Your system will let you know when a power failure has occurred during your absence from home. If the outage period is less than the battery life, a "?" will be displayed on the right side of the time display, which would be the current time. For example, **11:23?** on the display panel means there has been a power outage and the current time is 11:23. To remove the "?" from the display, exit Voice Control and go back to ***OPERATIONS***, and then re-enter voice control. If the outage period exceeds the life of the battery, the display will show **ENTER P.I.N.**; follow the procedure for entering your P.I.N. (see Section 7.1).

NOTE: IF THE SERIES II HOME AUTOMATION SYSTEM IS UNPLUGGED OR A POWER FAILURE OCCURS, IT WILL AUTOMATICALLY SWITCH TO BATTERY OPERATION. IN BATTERY OPERATION, ITS **ONLY** FUNCTION IS TO HOLD THE MEMORY. IT **WILL NOT OPERATE** ANY APPLIANCE OR LAMP, TELEPHONE SYSTEM OR BUILT-IN ALARM CIRCUIT **UNTIL THE POWER HAS BEEN RESTORED TO THE AC OUTLET.**

THIS PAGE

INTENTIONALLY

LEFT BLANK

SECTION 6 - SETTING UP UNIT

Contents

6.1 DISPLAY PANEL 25
6.2 KEYBOARD 25
6.3 VOLUME CONTROL 27
6.4 SENSITIVITY CONTROL 27

OPERATIONS

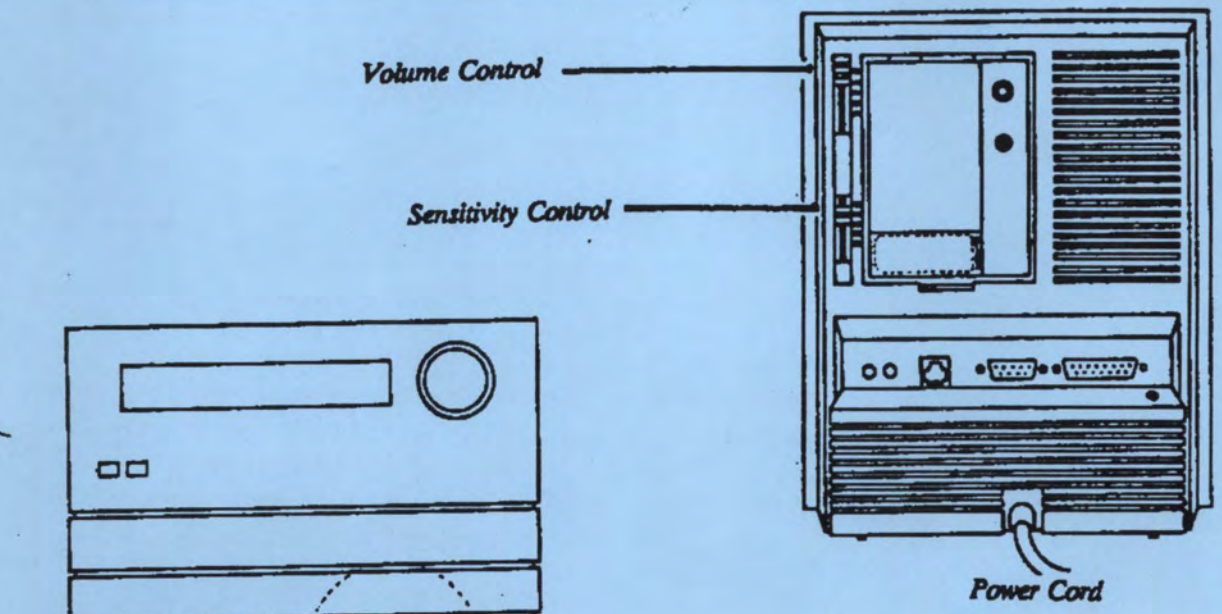


FIGURE 6-1

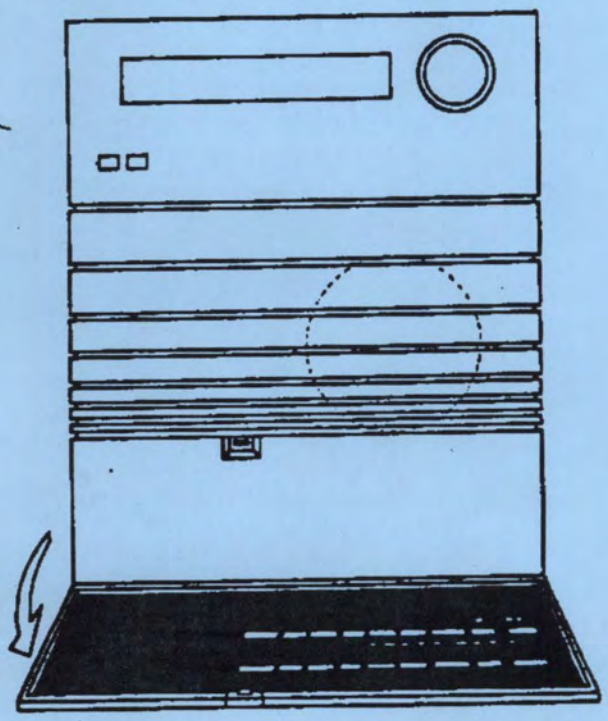
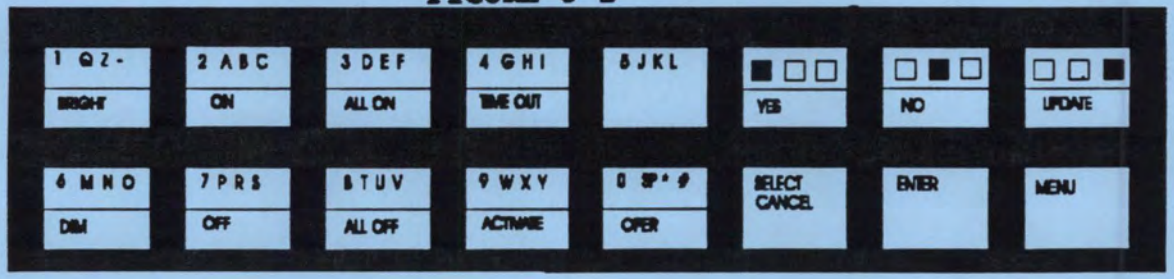


FIGURE 6-2



FIGURES 6-1 and 6-2

We want to familiarize you with the control panel features and their functions, so that you can proceed to set up and train your new Series II home automation system.

6.1 DISPLAY PANEL

The display panel is a 16-character, alpha-numeric, vacuum fluorescent display at the top front of the Series II home automation system (see Figure 3-1). As mentioned in Section 3.1.1, the display panel acts as a window to give you set up and operating information. It's designed to be on continuously.

If you wish, you may dim or brighten the factory-set illumination intensity level of the displayed information (see Section 9.3).

Throughout this Owner's Guide we will be referring to information that **will be displayed on the display panel.** In the Owner's Guide ONLY, this information will appear between asterisks: * *. When the same information is displayed on your display panel, NO asterisks will appear.

EXAMPLE: In the Owner's Guide: When ***OPERATIONS*** is said to be displayed on the display panel, asterisks will appear on both sides of the word. On the display panel: **OPERATIONS** will appear with NO asterisks on the display.

NOTE: IN VOICE CONTROL MODE, YOUR DISPLAY PANEL WILL **BLINK OR PULSE SLIGHTLY.** THIS IS NORMAL; NOTHING IS WRONG WITH THE SYSTEM. EACH TIME THE DISPLAY BLINKS OR PULSES, IT HAS REMOVED ALL SOUND OR RECOGNITION IT HAS HEARD AS OF THAT MOMENT.

6.2 KEYBOARD

The keyboard is located on the front hidden panel of your unit (see Figure 6-2). It consists of 16 pressure-sensitive keys (2 rows of 8), which will be used for training, programming, and operating the Series II home automation system. As you can see by looking at the keyboard, each key has more than one function. Following is a brief description of each key and its possible uses. A more detailed explanation will be given in later sections of this Owner's Guide as it becomes necessary to use the various keys.

When this Owner's Guide refers to any key you will be instructed to use in setting up and operating the Series II home automation system, that key will appear between < > symbols. When any other reference is made to a key, the key will NOT appear between < > symbols.

EXAMPLE: Instruction in Owner's Guide: To enter the number "1" into the system, press the **<1>** key; then press the **<ENTER>** key. Other reference in Owner's Guide: The **ENTER** key is used every time you want to enter information into your system.

NOTE: WHEN YOU ARE INSTRUCTED TO PRESS A KEY, PRESS THE KEY ONCE ONLY, UNLESS YOU ARE SPECIFICALLY INSTRUCTED OTHERWISE. OCCASIONALLY, YOU WILL BE INSTRUCTED TO PRESS A KEY "UNTIL" A SPECIFIC MENU SELECTION APPEARS ON THE DISPLAY PANEL, OR TO PRESS A KEY "TWICE."

In the various modes of operation, one function of the keys is to enter information requiring numbers. The first 5 keys in the top row are numbered 1 through 5; the first 5 keys in the bottom row are numbered 6 through 0. When you have to enter number information, a telephone number for instance, press the appropriate number keys.

EXAMPLE: To enter the telephone number, 1-123-456-7890, you would use the 1 key twice and the other number keys once each.

Several of these keys also have other functions (see Section 11.2 for detailed information):

* Key **1** is the **BRIGHT** key to brighten lights.
* Key **2** turns **ON** a light or appliance.
* Key **3** turns lights **ALL ON.**
* Key **4** Time-out
* Key **5** Activate
* Key **6** will **DIM** lights.
* Key **7** turns **OFF** a light or appliance.
* Key **8** turns lights and appliances **ALL OFF** simultaneously.

To enter information requiring letters of the alphabet, use the Alpha Select mode of operation. The number keys have different functions when they are used in the Alpha Select mode of operation (see Section 12.3 for detailed information).

The last three keys on the top row are **Alpha "1", Alpha "2"** and **Alpha "3"** (see Figure 6-3). These three keys have two functions each. **First**, in the Alpha Select mode of operation, these keys will permit you to choose which **letter** on the number keys (**1** through **0**) will be entered into your unit. The three small squares above the thick line correspond to the position of alphabet letters above the thick line on the number keys.

EXAMPLE: Alpha Select Key 1, with the solid square in the first of three possible positions, it allows you to select the letter **A**, the first letter selection on **Key 2. Alpha Select Key 3**, with the solid square in the third of three possible positions, allows you to select the letter **C**, the third letter selection on **Key 2**, and so on. This procedure may be used to spell out names of devices the Series II home automation system will control (see Section 12.3).

The **second** use of these three keys is: **Alpha 1 -- YES; Alpha 2 -- NO;** and **Alpha 3 -- UPDATE.** These functions, which are used in teaching the Series II home automation system to understand your verbal commands, will be discussed in detail in Section 10.8. Below the three Alpha keys are the **<SEL/CANC>** key (Select/Cancel), the **ENTER** key and the **MENU** key.

The **SEL/CANC** key has two basic functions:

* In the Select mode (the **SEL** feature of the key), pressing the **SEL/CANC** key enables you to scroll through items on the menu so you may select the one you want when it appears on the display.

* The Cancel mode (the **CANC** feature of the key), allows you to cancel or change an incorrect entry.

EXAMPLE: If you entered a "5" and meant to enter a "6", you would press the **<SEL/CANC>** key, which would cancel the "5." Then you would enter the correct information, in this case, "6."

The **ENTER** key permits you to **enter** any section of the main menu or any section of the various sub-menus in the system as you scroll through the menu items. This key also permits you to **enter**, or record specific information you wish to have accepted into the system's memory.

EXAMPLE: You want to set the display level of the Series II home automation system. By pressing the **<SEL/CANC>** key, you would scroll through the System Set Up menu until ***DISPLAY LEVEL*** appears on the display panel. Then, you would press the **<ENTER>** key to **enter** the Display Level part of that menu. You would also use the **<ENTER>** key to **enter** the information you wish to have accepted into the system's memory.

Pressing the **MENU** key **once** allows you to return to the beginning of **each individual menu section.** If the **MENU** key is pressed **three times in succession**, you return to the **top of the system's main menu** (OPERATIONS) regardless of where you are in the system.

WHENEVER THE SYSTEM IS NOT DISPLAYING * BUSY ***, PRESSING THE MENU KEY THREE TIMES IN SUCCESSION WILL STOP ALL FUNCTIONS AND THE SYSTEM WILL RETURN TO OPERATIONS, LOCATED AT THE TOP OF THE MAIN MENU. IF A VOICE CONTROL PASSWORD IS SET, AND THE SYSTEM IS IN VOICE CONTROL, THE PASSWORD WILL BE REQUESTED BEFORE EXITING VOICE CONTROL.**

6.3 VOLUME CONTROL

The volume control setting is on the back, top left corner of the Series II home automation system (see Figure 6-1). It controls the volume of the person's voice coming through the speakerphone, as well as how loud the Series II home automation system will reply. We suggest you place the volume control at the middle of the volume range and adjust it later if you desire.

6.4 SENSITIVITY CONTROL

The sensitivity control is located just beneath the volume control (see Figure 6-1). This control allows you to adjust the "hearing" level of the Series II home automation system. Once the sensitivity control has been properly set, you may operate the Series II home automation system from across the room even when your TV, radio, stereo, or a combination of entertainment units are on at reasonable listening levels. Reasonable listening levels for this purpose would be having the volume controls set slightly higher than they would be if people were conversing while the units were on. Follow these procedures to set the sensitivity control:

1. Move the sliding sensitivity control switch to the top, which is its maximum setting.

2. Turn on your TV, radio or stereo, or any combination of them, to reasonable listening levels.

3. Check the **RED** sensitivity light (see Figure 3-1) on the front of the unit. If it's on or flickering, it's detecting the other noise in the room. Slowly lower the sensitivity control switch until the light goes out completely. At that point, even though the TV, radio or stereo are turned on, your unit has been properly balanced to operate through voice command in that room.

NOTE: If the sensitivity control switch is at its lowest possible setting and the light is still flickering, the entertainment units are **TOO LOUD** for the SERIES II home automation system to operate. You may, **(A)** lower the volume of the TV and radio; **(B)** move the unit to another location in the room and repeat the steps above; or **(C)** a combination of both of the above may be necessary to properly balance your system to the room in which you intend to use it. Ideally, the sensitivity control setting should be near the middle of its minimum and maximum ranges to give you the greatest flexibility in making adjustments to changing noise levels in the room. **THIS INITIAL BALANCING PROCEDURE IS ESSENTIAL FOR PROPER OPERATION OF THE SERIES II HOME AUTOMATION SYSTEM, AND IT MUST BE DONE PROPERLY BEFORE YOU PROCEED.** Without correct balance, your unit will not function properly in the VOICE CONTROL mode of operation. Therefore, please take the necessary time **NOW** to balance the SERIES II home automation system. If you move it to another room, you must follow these same set up procedures for that particular room.

THIS PAGE

INTENTIONALLY

LEFT BLANK

SECTION 7 - PREPARING FOR OPERATION

Contents

7.1	ENTERING P.I.N.	30
7.2	SYSTEM TEST	30
7.3	SET UP FORMS	31
7.4	DEFAULT SETTINGS	31

7.1 ENTERING P.I.N.

On the inside front cover of your Owner's Guide you will find the P.I.N. (your Product Identification Number). This is a 4-digit alpha-numeric code, which must be entered into your unit before you can start operating it (and when a power outage exceeds the life of your battery). **THE SERIES II HOME AUTOMATION SYSTEM CANNOT FUNCTION WITHOUT ENTRY OF THE P.I.N.** Please keep this number in a safe place, **NOT** with the Series II home automation system. If you lose the number, your unit will have to be returned to the manufacturer with proof of purchase, and a fee will be charged for supplying the unit with a new P.I.N. **NO P.I.N. NUMBER WILL BE GIVEN OVER THE TELEPHONE.** THIS IS FOR YOUR PROTECTION. If your unit is stolen and you have mailed in your registration warranty card, you may notify us so we can be on the look-out for your unit. Remember, the Series II home automation system will **NOT** function without the P.I.N.

At this point, you should have started the procedure for applying power to your system and are ready to enter your P.I.N. You will be using the Alpha Select keys in the upper right-hand corner of the keyboard and the number keys (see Figure 6-2). Now, using the 4-digit code, which for our example **ONLY** (your P.I.N. will be different) will be 1J7Q, proceed with the following steps to enter **YOUR** P.I.N. Substitute, in correct sequence, the numbers or letters of **YOUR** P.I.N. for the numbers and letters of our example code:

EXAMPLE: P.I.N. = 1 - J - 7 - Q

1. With ***ENTER P.I.N.*** on the display, press the **<1>** key.

2. Press the first Alpha Select key (with the solid blue square in the first position); then press the **<J>**, or the number **5** key.

3. Press the **<7>** key.

4. Press the third Alpha Select key (with the solid blue square in the third position); then press the **<Q>**, or the number **1** key.

5. As each of the alpha-numeric keys are pressed, an asterisk (*) should appear on the display panel in the space after ***ENTER P.I.N.***. When 4 asterisks are displayed, press the **<ENTER>** key.

6. If you have correctly entered your P.I.N., ***QUICK SETUP ?*** will appear on the display. If not, you have made a mistake in one or more of the number/letter entries. Press the **<SEL/CANC>** key and repeat the procedure for entering your P.I.N.

7.2 SYSTEM TEST

The Series II home automation system will allow you to test the circuitry and memory locations for proper operations. **WARNING**: This will lose or destroy all memory or trained information stored in your unit. Do this test **ONLY** when you first get the system or if you've had a power failure and lost all memory in the system. Any other use will **DESTROY ALL MEMORY**. All recognition training, device set ups, and timers within your unit will be lost. To perform the system test procedure, follow these steps:

1. Starting with ***OPERATIONS*** on the display, press the **<SEL/CANC>** key until ***SYSTEM SET UP*** appears; press the **<ENTER>** key.

2. Press the **<SEL/CANC>** key until ***SYSTEM TEST*** appears, then press the **<ENTER>** key.

AGAIN NOTE: ENTERING THIS LOCATION WILL DESTROY ALL MEMORY. THIS TEST SHOULD ONLY BE USED WHEN YOU HAVE LOST ALL MEMORY WITHIN THE UNIT.

3. *ERASE MEMORY?* will appear on the display. Press the first Alpha Select key (marked **YES**).
   (If you do **not** want the memory erased, press the **<NO>** key.)

4. *ARE YOU SURE?* will appear. Press the first Alpha Select key (marked **YES**). Your unit will begin a system test procedure. This is the same testing that happens when you first apply power to the system. See Section 5.2 for more information.

NOTE: IF ANYTHING OTHER THAN THE *TEST PASSED OK* APPEARS, PLEASE CONTACT YOUR LOCAL SERVICE REPRESENTATIVE FOR REPAIR.

DO NOT ATTEMPT TO OPEN THE BACK OF THIS UNIT. THERE ARE NO SERVICEABLE PARTS INSIDE. IF YOU OPEN THE BACK OF THE UNIT YOU WILL VOID THE WARRANTY.

7.3 SETUP FORMS

Use the SetUp Forms located at the end of this Owner's Guide to assist you in setting up and training certain features of the Series II home automation system. Timer forms aid in setting up and tracking the timers in the Series II home automation system. The other forms cover the Lamp and Appliance Module Section (Section 8), the Setting Up Device Section (Section 9.4), and the Teaching the Series II home automation system Section (Section 10.7) of the Guide.

7.4 DEFAULT SETTINGS

The Series II home automation system comes with many decisions already made for you. We call these DEFAULT settings. Unless you make changes in accordance with instructions in the various Owner's Guide sections specified, you will be using these DEFAULT settings in the operation of your unit. Following are the DEFAULT settings your unit contains when you purchase it:

1. **DISPLAY LEVEL** - The display level, or brightness level of words appearing on the display panel. The settings are **VERY LOW, LOW, MEDIUM** and **HIGH**. The DEFAULT is set at **HIGH** (see Section 9.3, Setting Up Display Level).

2. **SETTING UP DEVICES** - The Series II home automation system will give you operating control of many devices (lamps, appliances, entertainment units, etc.). The first group of 42 are accessible from the Voice Control mode of operation. All 96 devices may be used by timers. All 96 devices are accessed by Manual (touch) Control operation. All of these devices have been preset for MODULES with House Code settings from **A-1** to **F-16**. These three types of operating controls will be fully explained as you set up the Series II home automation system.

   The letters and numerals designate House Codes and Unit Codes. The first and second group of devices, (a total of 96) are set to these codes. This will simplify setting up lamp and appliance modules (see Section 8). Instructions for changing the House and Unit Codes are in Section 9.4 (page I-4).

3. **DIM FACTOR** - Your lights may be dimmed to a predetermined intensity level from 1 through 16. The DEFAULT has been set at level 8. See Section 9.5 if you wish to change this level of dimness.

4. **TIMERS** - All timers have been set to the empty status. This may be changed in accordance with instructions in Section 12.1.

5. **ALARM** - Is **NOT SETUP**. All of the settings (the 60 seconds in/out, the 5 minutes blinking and the verbal response), and other DEFAULT settings for the Intrusion Detection System may be changed (see Section 12.2).

6. **ALPHA DISPLAY** - The various modes in which the Series II home automation system can operate and the commands you give it will appear on the display panel. Alpha (alphabet) Display is a mode of operation that, among other things, permits you to change terminology in DEFAULT settings to terminology of your preference for the various devices the Series II home automation system is controlling. Device 1, Device 2, etc. (through Device 96), are DEFAULT names for the various devices.

EXAMPLE: If you decide Device 1 will be a lamp, when you say, "Lamp on," ***DEVICE 1*** will appear on the display panel. This is the DEFAULT setting for that particular lamp. If you prefer ***LAMP*** to appear on the display panel instead of ***DEVICE 1***, you may make that change following instructions in Section 12.3.

7. **FOCUS TOLERANCE** - This determines how precisely you must speak to the Series II home automation system. The focus tolerance DEFAULT is set to 15; to change it, see Section 10.4.

8. **PHONE DIALER** - The Telephone System in the Series II home automation system will accept Touch Tone or Pulse Dialing. The DEFAULT is set for Touch Tone Dialing; to change, see Section 9.6.1.

9. **BAUD RATE** - Used for computer communications. The DEFAULT is set to 4800 baud; to change, see Section 9.7.

10. **SET HOUSE CODES** - For the GOOD NIGHT or ALL-OFF command, the house code is set to yes on House Code **A only**; to change it, see Section 9.8.

11. **12 OR 24 HOUR DISPLAY MODE** - The DEFAULT for this is the 12- hour mode, which is U.S. standard time, as compared to the 24-hour mode, which is European or military time. To change the DEFAULT, see Section 9.9.

12. **SET PASSES** - The number of training passes required to teach the Series II home automation system. The DEFAULT is 1 pass; to change this, see Section 10.2.

13. **ACTIVATE DELAY** - Is an automatic, definable (in seconds) on/off toggle. It's set to (5) seconds. See Section 9.10.

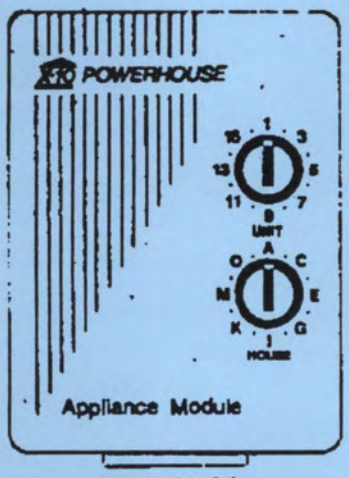
14. **TIME-OUT** - Is an automatic, definable (in minutes) on/off "sleep timer," and is set to 30 minutes. See Section 9.11.

SECTION 8 - SETTING MODULES

Contents

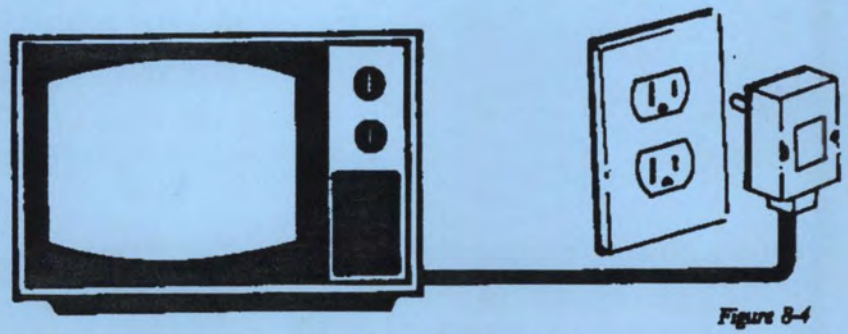
8.1 INTRODUCTION 35
8.2 SETTING UP LAMPS 35
8.3 SETTING UP APPLIANCES 35
8.4 SETTING UP WALL SWITCHES OR RECEPTACLES 36

(figures 8-1,2,4,5)



Appliance Module

Figure 8-1



Appliance Module Only or Infrared Control Interface (IR00)

Figure 8-4

Unit Code

House Code

Lamp Module

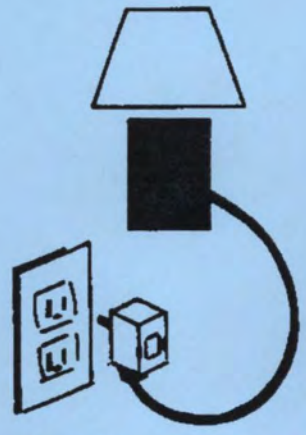


Figure 8-2

Lamp Module

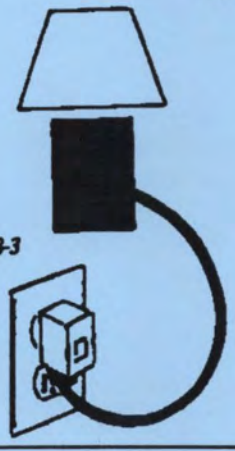


Figure 8-3

FIGURES 8-1 through 8-5

8.1 INTRODUCTION

The Series II home automation system comes with a **lamp module** for incandescent lamps and an **appliance module** for a TV, coffeemaker, radio, etc. (See figure 2-1). These modules receive their information through a process known as carrier current. This means the signals sent to the modules from the Series II home automation system or other controllers are transmitted through the wiring in your home's electrical system. Each lamp, appliance, or any other device you wish the Series II home automation system to operate, requires an appropriate module.

Each module has two dials, one **red** and one **black**. The **red** dial is the House Code dial. It has 16 House Code settings (A through P) from which you may choose. The **black** dial is the Unit Code dial; it has settings (1 through 16). By using the full range of House Code and Unit Code settings, you have a total of 256 possible settings available. The Series II home automation system will control any of the 256 possible settings. **Forty-two** of these may be directly accessed by voice. **A total of 99**, may be directly accessed by timers. The rest may be accessed in the Manual Control mode. To eliminate any possible confusion, we have provided a **Set Up Form** at the back of this Owner's Guide to aid you in establishing and recording the proper settings for your lamps, appliances and other devices. Remove the SetUp Form and proceed with setting up your lamps.

8.2 SETTING UP LAMPS

1. Set the **red** House Code dial on the lamp module (see Figure 8-1) to the House Code you prefer. Record this on your SetUp Form under Device Number 1, House Code.

2. Set the **black** Unit Code dial on the lamp module (see Figure 8-1) to the 1 through 16 number of your choice, and record this on your SetUp Form under Device 1, Unit Code.

3. Plug the lamp into the lamp module's receptacle (see Figure 8-2).

4. Plug the lamp module into a standard 110 volt AC wall outlet (see Figure 8-3).

5. Turn the lamp's ON/OFF switch until the light goes ON.

6. Repeat these steps with other lamps. Leave ALL of them **ON** until every device is set up.

As you set up your lamps, appliances and other devices, remember to record each House Code letter and Unit Code number on the Set Up Form.

EXAMPLE: To get you started, the first 2 devices have been set up for you on the Set Up Form. House Code A, Unit Code 1 is recorded as Device 1, Lamp. House Code A, Unit Code 2 is recorded as Device 2, Radio.

After all lamps have been set up and recorded on the SetUp Form, you are ready to set up appliances.

8.3 SETTING UP APPLIANCES

1. Set the **red** House Code dial on the appliance module to the desired House Code setting (see Figure 8-1).

2. Set the **black** Unit Code dial on the appliance module to the desired number from 1 through 16. If you pick the same number as a lamp module, the appliance and lamp will turn ON and OFF at the same time(s). This is

desirable, for example, if you want to wake-up to music and have your bedside lamp also turn on.

3. Plug the appliance (TV, stereo, coffeemaker, etc.) into the appliance module's receptacle (see Figure 8-4).

4. Plug the appliance module into a standard 110 volt AC wall outlet (see Figure 8-5).

5. If the appliance has an ON/OFF switch, turn it to the **ON** position. If it doesn't have an ON/OFF switch, it will not go on until the module receives an **ON** command.

6. Repeat steps above for other appliances. Leave them **ON** until all devices are set up.

7. Record the House Code letter and Unit Code number for each appliance you set up on your Device SetUp Form.

8. After you finish setting up your selected appliances with modules, set up any wall switch modules you desire.

8.4 SETTING UP WALL SWITCHES OR RECEPTACLES

1. Using a small screwdriver, turn the House Code dial (**red** arrow) on the wall switch module to the desired House Code setting.

2. Turn the Unit Code dial (**black** arrow) to an unused number, 1 through 16. Remember, if you pick the same number as another module, they will go ON and OFF together.

3. **TURN OFF POWER AT CIRCUIT BREAKER OR FUSE BOX.**

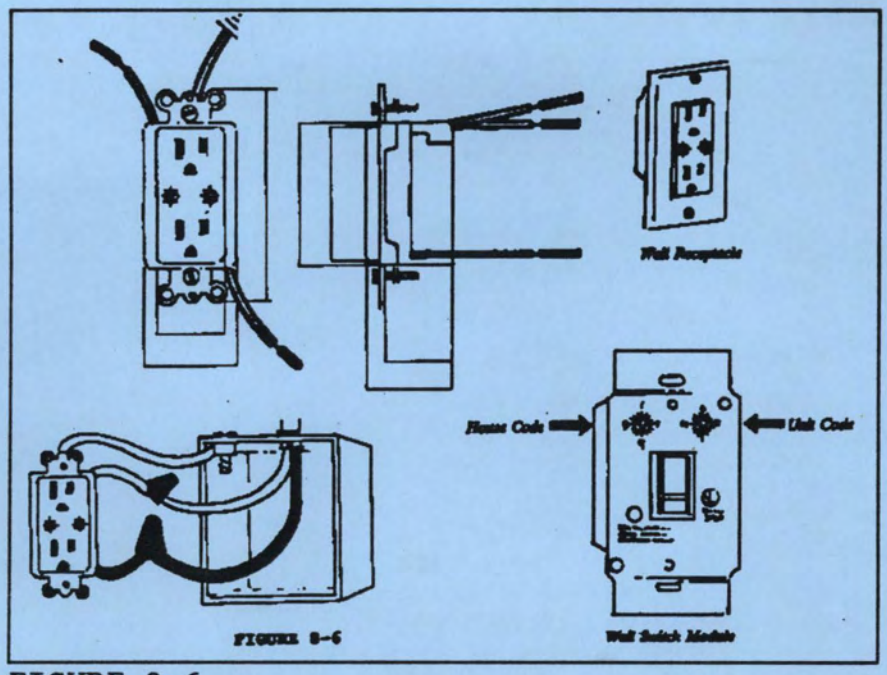
4. Remove the existing wall switch plate, unscrew all the wall switch plates from the wall box, and disconnect the wires from the old wall switch.

5. (See Figure 8-6). Connect the blue and black wires on the wall switch module to the same two wires that went to the old switch. If one of the wires to the old switch is black, connect it to the **blue** module wire. Make sure connections are tight and bare wire ends cannot touch the wall box. Use electrical tape to cover bare wire ends, if necessary.

6. Screw wall switch module back into the wall box. Press the switch button until the light comes on. Replace wall switch plate.

7. Record the House Code letter and the Unit Code number for the wall switch on the Set Up Form.

8. Repeat steps 1 through 7 for all other wall switches you want to set up.


Wall Receptacle
House Code
Unit Code
FIGURE 8-6
Wall Switch Module
FIGURE 8-6

THIS PAGE

INTENTIONALLY

LEFT BLANK

SECTION 9 - SETTING UP THE SYSTEM

Contents

9.1 QUICK SETUP 40
9.2 SETTING UP CLOCK 40
9.3 SETTING UP DISPLAY LEVEL 41
9.4 SETTING UP DEVICES (OPTIONAL) 42
9.5 DIM FACTOR (OPTIONAL) 45
9.6 SETTING UP TELEPHONE 45
9.6.1 PULSE OR TONE DIALING 45
9.6.2 STORING TELEPHONE NUMBERS 46
9.7 SETTING BAUD RATE 47
9.8 SETTING HOUSE CODES 47
9.9 12 OR 24 HOUR DISPLAY MODE 48
9.10 SET ACTIVATE 49
9.11 SET TIME-OUT 49
9.12 VOICE CONTROL PASSWORD 50
9.13 RS-232 (MODEM) ACCESS PASSWORD 50
9.14 SET CATCH UP TIME 51
9.15 SET DAYLIGHT SAVINGS TIME 51
9.16 MANUAL DAYLIGHT SAVINGS TIME 51
9.17 SETUP LOCATION FOR SUNRISE AND SUNSET 52

9.1 QUICK SETUP

This section, **Quick Setup**, is for those of you who want to put the **Series II** home automation system to work right away.

At this time, please listen to the training tape that came with your unit or if you purchased the video, watch the video training tape. The tape, in conjunction with the **"QUICK CHART"** referenced part of the Owner's Guide, will enable you to learn how to operate the Series II home automation system quickly.

Before you begin Quick Setup it's imperative that you understand the basic principles and operations of the system as explained in ALL the previous sections of this Guide. It's particularly important that you're completely familiar with placement of the unit, the safety precautions in Section 4, and the warranty information.

Because this method of instruction is purposely designed to be "quick," the tape will simply tell you to perform certain procedures. Once you have mastered these procedures, you may change any format, word or name. All the information on the tape, as well as instructions for making any changes, is covered in detail in the various sections of this Guide. After the unit is turned on and the P.I.N. is entered, it will display ***QUICK SETUP***. If you do not wish to use this feature, press the **<MENU>** key and ***OPERATIONS*** will appear. To use this feature, press the **<ENTER>** key. The system will automatically take you to the major setup sections. As the name of each section appears on the display, it may be accessed by pressing the **<ENTER>** key or bypassed by pressing the **<SEL/CANC>** key. If you accidently skip a desired step, return to that step by pressing the **<SEL/CANC>** key until the selection reappears on the display. Then, press the **<ENTER>** key.

9.2 SETTING UP CLOCK

This procedure sets the proper day, time, and date in your clock once you have installed it. The Series II home automation system has the ability to not only display time, but also use this information to control lamps and appliances at predetermined times. Setting the clock is one of the first steps in the operation of the unit. To set up the clock, please follow these steps:

1. Press the **<MENU>** key until you see ***OPERATIONS*** on the display panel.

2. Press the **<SEL/CANC>** key until ***TIME FUNCTIONS*** appears; then press the **<ENTER>** key.

3. ***SET UP TIMERS*** now appears. Press the **<SEL/CANC>** key until ***SET CLOCK*** appears; then press the **<ENTER>** key.

4. Now ***MONTH:1*** should be displayed. Press **<SEL/CANC>**, At this time, you will enter the current month. January is 1, February is 2, and so forth through December, which is 12.

EXAMPLE: If the current date is February 15th, February is month 2, so you would press the number **<2>** key. When ***2*** appears on the display panel, press the **<ENTER>** key.

NOTE: IF YOU PRESS THE WRONG KEY WHEN ENTERING **ANY** INFORMATION, YOU MAY CORRECT IT BY PRESSING **<SEL/CANC>**, AND THEN PRESSING THE CORRECT KEY(S). **THIS ERROR CORRECTION PROCEDURE APPLIES THROUGHOUT THIS SECTION.**

5. You will see ***DATE:1*** displayed. **Press <SEL/CANC>**, What you will enter now is today's date.

EXAMPLE: For our example, the date is the 15th day of the month, so you would press the <1> key, then the **<5>** key, and then the **<ENTER>** key.

6. You will now see ***YEAR:1*** **Press <SEL/CANC>,** enter **ONLY** the last two numerals of the current year.

EXAMPLE: 1994 would be entered as **94.**

To select 94, press the **<9>** key and then the **<4>** key. If only "4" or only "9" or, any other number is displayed, you have made a mistake. Press the **<SEL/CANC>** key to "erase" the incorrect numbers, then press the correct number keys again. When ***94*** is displayed, press the **<ENTER>** key.

7. Now you will see ***DAY:SUNDAY*. Press <SEL/CANC>,** through Saturday, until the correct day is displayed. Press the **<ENTER>** key.

8. Next you will see ***HOUR:1*. Press <SEL/CANC>,** Enter the correct hour (1 through 12) for the current hour of the day.

EXAMPLE: Let's say you want to enter 9:15 AM (or PM); press only the **<9>** key. When ***9*** is displayed, press the **<ENTER>** key.

9. Now ***AM*** should appear. Our example is for the morning hour, so press the **<ENTER>** key.

10. If you wanted to enter a **PM** time, you would press the **<SEL/CANC>** key until the **PM** time is displayed, then you would press the **<ENTER>** key.

NOTE: AT THIS POINT IN THE MENU, EACH TIME YOU PRESS THE **<SEL/CANC>** KEY, IT WILL SWITCH BETWEEN **AM** AND **PM** SETTINGS. WHEN THE DESIRED SETTING IS DISPLAYED, PRESS THE **<ENTER>** KEY.

11. ***MINUTES:1*** is now displayed on the panel. **Press <SEL/CANC>,** Press the correct number keys to indicate current minutes. In the example 9:15, you would press the **<1>** and the **<5>** keys; when the numbers appear on the panel, press the **<ENTER>** key.

NOTE: WHEN THE MINUTES ARE SET, THE SECONDS WILL RESET TO .00.

You have completed setting up the clock in the new Series II home automation system, and you will now see ***SET UP TIMERS*** on the panel. You may change the device setting at this time by following the instructions in Section 9.4; or, you may press the **<MENU>** key, which will return you to the top of the menu ***OPERATIONS***, so you may proceed with another operation.

9.3 SETTING UP DISPLAY LEVEL

As mentioned in Section 7.4, the Series II home automation system offers a range of brightness levels - **VERY LOW**, **LOW**, **MEDIUM** and **HIGH** on the display panel. The DEFAULT is factory set at **HIGH**. If this brightness level is satisfactory, skip this section. If you wish to dim or brighten the information shown on the display panel, follow these steps:

1. Press the **<MENU>** key until ***OPERATIONS*** appears on the display panel.

2. Press the **<SEL/CANC>** key until ***SYSTEM SET UP*** appears, then press the **<ENTER>** key.

3. You will now see ***STORE PHONE #***; press the **<SEL/CANC>** key until ***DISPLAY LEVEL*** appears, then press the **<ENTER>** key.

4. ***VERY LOW*** now shows on the display panel. Select the brightness you desire by pressing the **<SEL/CANC>** key until the proper brightness level appears, then press the **<ENTER>** key.

NOTE: AS THE BRIGHTNESS OPTIONS APPEAR ON THE DISPLAY PANEL, THEIR BRIGHTNESS LEVEL WILL CHANGE IN ACCORDANCE WITH THE WORD ITSELF. FOR INSTANCE, **VERY LOW** WILL APPEAR VERY DIM ON THE DISPLAY. **HIGH** IS THE BRIGHTEST LEVEL POSSIBLE FOR THE DISPLAY.

9.4 SETTING UP DEVICES (OPTIONAL)

This section is optional. If you refer to the Set Up Form in the back of this Guide, you'll see that 96 devices have been set up as described in Default Settings, Section 7.4. Device 1 is set to House Code A, Unit Code 1; Device 2 is set to House Code A, Unit Code 2, and so on. Device 17 would start with House Code B, Unit Code 1, and continue through Device 96, which would be House Code F, Unit Code 16. **You need to use this section of the Guide ONLY if you want to change the devices to house codes other than those that come standard with the unit or, if you want to set up ASCII codes.**

NOTE: A DEVICE MAY ALSO BE SET UP USING AN ASCII CODE TO SEND CHARACTER INFORMATION TO YOUR COMPUTER OR YOUR TV/I.R. CONTROLLER BY VOICE. A DEVICE MAY ALSO BE SET UP AS AN PARALLEL PORT, ETC., FOR SENDING A SIGNAL TO THE PARALLEL PORT FOR THE EXPANDED FEATURES DESCRIBED IN SECTION 15.3. THIS SECTION INSTRUCTS YOU HOW TO SET UP DEVICES AS MODULES, AND THERE IS A SUB-SECTION ON ASCII CODES. STARTING WITH DEVICES AS MODULES, WE WILL USE DEVICE NUMBER 1 FOR OUR EXAMPLE AND SET IT UP AS A LAMP MODULE. PLEASE REFER TO YOUR SET UP FORM.

1. Starting with ***OPERATIONS*** on the display panel, press the **<SEL/CANC>** key until ***SPECIAL OPTIONS*** is displayed. Press the **<ENTER>** key.

2. ***SET UP DEVICES*** appears. Press the **<SEL/CANC>** key until you see ***SET UP DEVICES***, then press the **<ENTER>** key.

3. You will now see ***DEVICE# ?***. Select the device number you wish to install at this time. Our example is Device Number 1; so press the **<1>** key, then press the **<ENTER>** key.

4. ***MODULE*** appears. This means that this device is being used as a module, like the lamp and appliance modules provided with the Series II home automation system. The 5 other possibilities that may be selected are:

   a. ***ASCII CODE*** - To send a signal to your computer or TV/I.R. Controller. If this is your selection, follow these steps:

      (1) With ***MODULE*** displayed, press the **<SEL/CANC>** key until ***ASCII CODE*** appears. Press the **<ENTER>** key.

      (2) ***CODE #?*** will appear. Enter the number from 1 to 255 that corresponds to the ASCII code you want transmitted through the serial port. Press the **<ENTER>** key. ***DEVICE #:*** will appear. If you want to enter another ASCII code, press the **<ENTER>** key; ***MODULE*** will appear. Press the **<SEL/CANC>** key until ***ASCII CODE*** appears, then press the **<ENTER>** key, and repeat the procedure for entering another ASCII code. If for use with

Voice Mouse software (see Section 15.3), follow set up instructions in the Voice Mouse User Manual. For use with the TV/IR Controller (see Section 15.3), follow the instructions given with the TV/I Controller.

b. ***PARALLEL PORT*** - For sending a signal to the Parallel Port and the accessory expansion unit. (NOT YET AVAILABLE.)

c. ***TELEPHONE*** - If you are using the Series II home automation system with another "phone based" home automation system, you can set the Series II home automation system to open the phone line, dial up to 8- digits and then hang up the line. (See note in Section 12-3.) The telephone number can contain the digits, # and *. Inserting a space or a - causes a pause in dialing to allow waiting for a second dial tone when calling from a business or when entering a pacer number. A space pauses for 6 seconds and a - for 3 seconds. If you would like to reference a number entered in another slot to expand the number of digits available to dial or to avoid entering the same number for each user you can dial the number stored in another slot by entering a **U** followed by a digit from 1 through 4 to select the user number and following this with a 2 digit slot number from 1 through 16. For example to access User 2 slot 3 you would enter **U203** the end of the phone number you are entering. No digits following the U command will be dialed.

d. ***MACRO*** - If you wish this device to be a MACRO, select this setting and enter the desired macro number 1-8 (Section 12.2).

e. ***ENERGY EYE*** If you wish this device to be an Energy Eye, select this setting and press the <ENTER> KEY (Section 12.12).

f. ***RING DEVICE*** If you wish this device to be a ring device, select this setting and press the <ENTER> KEY (Section 12.13).

g. ***EMPTY*** - This means that this device is not in current use.

To select one of the above possible settings, you press the **<SEL/CANC>** key until the appropriate choice was displayed on the display panel; then you press the **<ENTER>** key. In this case, ***MODULE*** is our choice and it's already displayed, so press the **<ENTER>** key.

5. ***ACTIVATE: NONE*** appears; This is a delay command which is used as a momentary on-off switch with a definable 1 to 60 second delay (this overrides the system activate delay time). If you wish to change the setting, (Default is not set up), press **<SEL/CANC>**. The word ***ACTIVATE:*** will appear.

6. The number of seconds of delay for the "toggle effect" (1- 60 seconds) should now be entered. After the correct number of seconds appear on the display, press the **<ENTER>** key.

7. ***IF SHORT. REVERSE*** will appear. If you enabled SHORT **FORM** mode and you don't say a command after the device name, the requested action will be performed. **REVERSE** is the default action. Other choices are: **BRIGHT, ON, ALL ON, DIM,**

6. The number of seconds of delay for the "toggle effect" (1- 60 seconds) should now be entered. After the correct number of seconds appear on the display, press the **<ENTER>** key.

7. ***IF SHORT. REVERSE*** will appear. If you enabled SHORT FORM mode and you don't say a command after the device name, the requested action will be performed. **REVERSE** is the default action. Other choices are: **BRIGHT, ON, ALL ON, DIM, OFF, ALL OFF** and **ACTIVATE**. Press the **<SEL/CANC>** key until the desired action is on the display, then press the **<ENTER>** key.

8. ***DIM DEVICE*** will appear. This means the device is going to be "talking" to a LAMP module. If the device is going to be "talking" to an appliance module, press the **<SEC/CANC>** key until ***SWITCH DEVICE*** is on the display and press the **<ENTER>** key. **(This will be important in voice control.)**

9. ***HOUSE CODE -A-*** will appear. This refers to the House Code selection dial of your module for Device 1. On your Set Up Form, the House Code for Device 1 is A; so press the **<ENTER>** key. If you wish to change the House code, press the **<SEL/CANC>** key and using the Alpha keys, enter the new House Code (A-P) and then press the **<ENTER>** key.

10. ***UNIT CODE -1-*** will appear on the display panel. You will enter the proper Unit Code (1 through 16) of the module you are using for this device. Per the sample on the Set Up Form, Module A-1, Lamp Module, and the Unit Code are 1; so press the **<ENTER>** key.

11. Displayed on your panel is ***IS: DEVICE 1***. This means that in the Voice Control mode, **"DEVICE 1"** will appear on the display panel* when you give the command "Lamp." Press the **<ENTER>** key at this time. You have completed installing Device #1.

***NOTE:** THE WORD **"DEVICE 1"** THAT APPEARS ON THE DISPLAY MAY BE CHANGED SO THAT THE WORD **"LAMP"** APPEARS INSTEAD (SEE SELECTION 12.5).

12. The panel will display ***DEVICE# ?***. You may install another device number at this time by entering the device number you wish, or you may press the **<MENU>** key twice to return to ***OPERATIONS***. If you wish to review an established device number, select that number. In this case, Device #1 has already been set up. Press the **<ENTER>** key, which will allow you to scroll through and review each setting in Device #1. If you wish to change any settings as they're displayed on the panel, press the **<SEL/CANC>** key and enter the correct information.

EXAMPLE: If you have House Code A, Unit Code 1 and you want to switch to House Code A, Unit Code 2, you would only have to change the 1 to a 2.

If you wish to erase the device settings completely, at ***DEVICE NUMBER?***, enter the device number you wish to erase. When the panel displays ***MODULE***, ***ASCII***, **or *PARALLEL PORT*** information, press the **<SEL/CANC>** key until ***EMPTY*** is displayed. Then press the **<ENTER>** key and all information for that device will be erased.

3. Press the **<SEL/CANC>** key until ***DIM FACTOR*** is displayed, then press the **<ENTER>** key.

4. ***DIM FACTOR 8*** is now displayed. This means that the dim level will dim 8 steps at a time. If you would rather have it dim a different # of steps, press the **<SEL/CANC>** key and enter a value from 1 through 16, then press the **<ENTER>** key. Press the **<MENU>** key twice to return to ***OPERATIONS***.

9.6 SETTING UP TELEPHONE

The Series II home automation system comes with a complete telephone, speakerphone and dialing system. By connecting the Series II home automation system directly to any standard telephone wall jack, it can receive phone calls, place phone calls by Pulse or Touch Tone dialing, and store up to 16 phone numbers per User. Once a call has been placed, either through the manual phone dialer (Section 11.3) or by Voice Control, the Series II home automation system will become a two-way speakerphone. Upon recognizing a busy signal, a dial tone, ten rings or a circuit busy signal, it will hang up automatically. The telephone number can contain the digits, # and *. Inserting a space or a - causes a pause in dialing to allow waiting for a second dial tone when calling from a business or when entering a pacer number. A space pauses for 6 seconds and a - for 3 seconds. If you would like to reference a number entered in another slot to expand the number of digits available to dial or to avoid entering the same number for each user you can dial the number stored in another slot by entering a **U** followed by a digit from 1 through 4 to select the user number and following this with a 2 digit slot number from 1 through 16. For example to access User 2 slot 3 you would enter **U203** the end of the phone number you are entering. No digits following the U command will be dialed.

NOTE: THE ONLY THING THE SERIES II HOME AUTOMATION SYSTEM WILL NOT DO IS RING WHEN YOU HAVE AN INCOMING CALL. THE RINGING OF YOUR OTHER TELEPHONES WILL ALERT YOU TO INCOMING CALLS.

The following procedures are for setting up your telephone:

9.6.1 PULSE OR TONE DIALING

1. With ***OPERATIONS*** on the display panel, press the **<SEL/CANC>** key until ***SYSTEM SET UP*** appears; press the **<ENTER>** key.

2. The display shows ***STORE PHONE #***. Press the **<SEL/CANC>** key until ***PULSE OR T.-TONE*** appears; press the **<ENTER>** key.

3. ***PULSE-DIALING?*** appears. Now select whether you want Pulse or Touch Tone dialing. By pressing the **<SEL/CANC>** key you will switch between ***TOUCH TONE-PHONE?*** and ***PULSE-DIALING?***. Press the **<SEL/CANC>** key until the proper selection is on the display; press the **<ENTER>** key.

9.6.2 STORING TELEPHONE NUMBERS

The Series II home automation system has the ability to store and dial up to 16 telephone numbers per User. These numbers will be recalled and dialed at your request when you are in the Voice Control mode. The following procedure is used to store the 16 numbers of your choice for future use.

1. Begin by pressing the **<MENU>** key until ***OPERATIONS*** appears on the display,

2. Press the **<SEL/CANC>** key until ***SYSTEM SET UP*** appears; then press the **<ENTER>** key.

3. ***STORE PHONE #*** appears; press the **<ENTER>** key. (You will now see ***USER 1*** displayed.)

NOTE: THE SERIES II HOME AUTOMATION SYSTEM IS ABLE TO RECOGNIZE AND RESPOND TO THE VOICE OF 4 USERS. THE FIRST USER IS DESIGNATED USER 1. THESE USER NUMBERS MAY BE CHANGED TO NAMES (SEE SECTION 10.14). SERIES II HOME AUTOMATION SYSTEM IS ABLE TO DISTINGUISH WHICH USER IS SPEAKING AND WILL RESPOND APPROPRIATELY TO EACH USER'S COMMANDS. USERS MAY BE ADDED TO, OR DELETED FROM SERIES II HOME AUTOMATION SYSTEM'S MEMORY TO CORRESPOND WITH YOUR NEEDS. USERS MAY BE MALE OR FEMALE, MAY SPEAK IN ANY LANGUAGE, AND USE ANY ACCENT OR DIALECT THAT IS NATURAL TO THEM.

If you are User 1, press the **<ENTER>** key.

4. The display now shows ***SELECT 1-16:*** a request for you to tell the system which of the 16 phone numbers you wish to set up. You are setting up the first telephone number, so press the **<1>** key and then the **<ENTER>** key. On the Set Up Form, the first telephone number is recorded as "Police."

5. Displayed on your panel is ***IS: NAME #1***. This means that in the Voice Control mode, ***NAME #1*** will appear on the display panel when you ask the Series II home automation system to call **"Police."** Press the **<ENTER>** key.

NOTE: THE WORD **"NAME #1"** THAT APPEARS ON THE DISPLAY MAY BE CHANGED SO THAT THE WORD **"POLICE"** WOULD APPEAR INSTEAD (SEE ECTION 12.3).

6. The display now shows ***EMPTY***. This means that there is currently no telephone number stored for **NAME 1**. Press the **<SEL/CANC>** key until * # * is displayed. Now press the number keys on the keyboard that correspond to the telephone number you wish to store (for long distance calls include the "1" access to area codes and the codes themselves). Each number will appear on the display as you enter it; when the entire telephone number is displayed, press the **<ENTER>** key. **Each telephone number may be up to 15-digits.**

EXAMPLE: The number 1-213-555-1212 would be entered as follows: Press the **<1>,<2>,<1>,<3>,<5>,<5>,<5>,<1>,<2>,<1>** and **<2>** keys, then press the **<ENTER>** key. This number is now stored in the #1 position.

NOTE: IT ISN'T NECESSARY TO USE HYPHENS OR SPACES IN TELEPHONE NUMBERS, BUT YOU MAY DO SO. TO ENTER A HYPHEN, PRESS THE THIRD ALPHA SELECT KEY (MARKED **UPDATE**), THEN THE **<1>** KEY. EACH USE OF A HYPHEN CAUSES ABOUT A 3 SECOND DELAY IN THE DIALING PROCESS.

7. ***SELECT 1-16:*** appears again, a request for you to enter and store another telephone number. You will be entering the second number you wish to store, so press the **<2)** key; ***NAME #2*** appears. Now enter the second telephone number following the same procedure as for the first number. All 16 numbers are stored in this manner. When you have finished storing the phone numbers, simply press the **<MENU>** key to return to the top of the menu.

NOTE: THE CORRECT PROCEDURE TO PLACE OR RECEIVE CALLS USING THE VOICE CONTROL MODE IS DETAILED IN SECTION 11.1.2.

9.7 SETTING BAUD RATE

Baud rate is the speed at which computers communicate with each other. Since the Series II home automation system is in reality a highly sophisticated computer, it has the ability to communicate with other computer systems. This is useful in saving all the information from the Series II home automation system to a computer for future reference, as described in Sections 13.5 and 13.6. **To do this you must be sure that the Series II home automation system and your computer have compatible matching speeds.**. Four basic speeds are used; they are the baud rates of 300, 1200, 2400 or 4800 and the protocol is X-MODEM. The default for the Series II home automation system is 4800. **This is an optional section of the Owner's Guide**; it's used only in the Advanced Function area and may be skipped if you don't need to change the baud rate. If the baud rate has to be changed to another speed, follow these steps:

1. Begin by pressing the **<MENU>** key until ***OPERATIONS*** appears on the display.

2. Press the **<SEL/CANC>** key until ***SYSTEM SET UP*** appears; then press the **<ENTER>** key.

3. ***STORE PHONE #*** is now on the display. Press the **<SEL/CANC>** key until ***SET BAUD RATE*** appears; then press the **<ENTER>** key.

4. ***BAUD-RATE:4800*** will appear. You may now select another speed by pressing the **<SEL/CANC>** key. When the appropriate baud rate is displayed, press the **<ENTER>** key. The display will return to ***STORE PHONE #***, which is the beginning of the System Set Up menu. You may press the **<MENU>** key to return to the top of the system's main menu.

9.8 SETTING HOUSE CODES

The Series II home automation system has the ability to operate and control a total of 256 separate devices. This total is comprised of basically 16 separate house codes, A through P. At some point you may want to deactivate or turn off several appliances or lamps at the same time without having to give individual commands for each device. This can be done in the Voice Control and Manual Control sections by using the **ALL-OFF**, or the **GOOD NIGHT** command in conjuction with device #1.

You may want to exclude certain devices from the **ALL-OFF** command. Examples of these might be a swimming pool filter that would be operating once a day, or a home heating system that would stay on even though everything else is being turned off. All those devices you do **NOT** want to be turned off by the **ALL-OFF** command would be set to a House Code that is excluded from the **ALL-OFF** command. **The DEFAULT setting for the Setting House Codes on the ALL-OFF command is House Code A ONLY**. All other house codes will be ignored in the **ALL-OFF** or **GOOD NIGHT** command. Proceed with this section only if you want to change the default to a different setting. The procedure for including or excluding the **ALL-OFF** command from the House Codes you set up in Section H are as follows:

1. Press the **<MENU>** key until ***OPERATIONS*** appears on the display.

2. Now press the **<SEL/CANC>** key until ***SYSTEM SET UP*** appears, then press the **<ENTER>** key.

3. Press the **<SEL/CANC>** key until ***SET HOUSE CODES*** appears; then press the **<ENTER>** key.

4. ***HOUSE CODE A YES?*** now appears. This is the DEFAULT setting for the **ALL-OFF** command. To keep this setting, press the **<ENTER>** key. To change the DEFAULT and exclude House Code A from the **ALL-OFF** command, press the **<SEL/CANC>** key. ***HOUSE CODE A NO*** now appears on the display; press the **<ENTER>** key and House

Code A will be excluded from the **ALL-OFF** command. Each time you press the **<SEL/CANC>** key, the display will switch between ***HOUSE CODE A NO*** and ***HOUSE CODE A YES***.

5. After you have entered your House Code A selection, ***HOUSE CODE B NO?*** will appear. At the prompt for each new House Code, repeat Step 4. **YES = WILL RESPOND** TO ALL- OFF AND GOOD NIGHT. **NO = WILL NOT RESPOND** TO ALL-OFF AND GOOD NIGHT.

Using this procedure, it's possible to shut off all lamps and appliances, except a specific House Code(s) you have excluded from the ALL-OFF command. For example, House Code M set to *NO* would exclude all lamps and appliances on Code M from responding to ALL-OFF and GOOD NIGHT, and they would remain ON.

NOTE: ONLY "ALL- ON" AND "ALL-OFF" COMMANDS SENT TO DEVICE #1 WILL USE THIS TABLE. IF AN "ALL-ON" OR "ALL-OFF" COMMAND IS SENT TO A DEVICE # OTHER THAN 1, THE "ALL-ON" OR "ALL-OFF" COMMAND WILL USE THE HOUSE CODE ASSIGNED TO THAT DEVICE. THE DEVICES WILL RECEIVE "ALL-OFF" COMMANDS EVEN IF THEIR HOUSE CODE IS NOT IN THE HOUSE CODE TABLE!

9.9 12 OR 24 HOUR DISPLAY MODE

Your clock has the option of displaying either the standard 12-hour AM/PM times or the 24-hour military or European time. If you wish to change the DEFAULT setting (the standard AM/PM display), follow these steps:

1. Starting with ***OPERATIONS*** on the display, press the **<SEL/CANC>** key until ***TIME FUNCTIONS*** appears; press the **<ENTER>** key.

2. Press the **<SEL/CANC>** key until ***12/24 HR. DISPLAY*** appears; press the **<ENTER>** key.

3. ***AM/PM DISPLAY?*** now appears. This means that when the current time appears on the display, it will be displayed as standard time (1 AM or 1 PM). If this is your choice, press the **<ENTER>** key. If you prefer to have the 24-hour military or European time displayed, press the **<SEL/CANC>** key; ***24 HOUR DISPLAY?*** will appear; press the **<ENTER>** key. After you have entered your selection, the system will return to the beginning of the System Set Up menu and ***STORE PHONE #*** will be displayed.

9.10 SET ACTIVATE

Activate is a command used in VOICE CONTROL as a momentary on-off switch with a definable 1 to 99 second delay. To change the ACTIVATE setting (set at 5 seconds) proceed with the following steps:

1. Starting with ***OPERATIONS*** on the display, press the **<SEL/CANC>** key until ***TIME FUNCTIONS*** appears; press the **<ENTER>** key.

2. Press the **<SEL/CANC>** key until ***ACTIVATE DELAY*** appears; press the **<ENTER>** key.

3. ***DELAY TIME:*** now appears. The number of seconds of delay for the activate command (1-99 seconds) should now be entered, then press the **<ENTER>** key.

9.11 SET TIME-OUT

Time Out is a command in VOICE CONTROL used as a sleep timer, or on-off switch with a definable **APPROXIMATE*** 1 to 60 minute (- 1 TO 59 SECONDS) delay. **TIME-OUT** is set at **30** minutes. To change this setting, proceed with the following steps:

1. Starting with ***OPERATIONS*** on the display, press the **<SEL/CANC>** key until ***TIME FUNCTIONS*** appears; press the **<ENTER>** key.

2. Press the **<SEL/CANC>** key until ***SET TIME OUT*** appears; press the **<ENTER>** key.

3. ***DELAY TIME:*** * now appears. Enter the number of delay minutes for the time-out command (1-60 minutes). After the correct number of minutes has been selected, press the **<ENTER>** key.

EXAMPLE: "Selection," "Radio," "Time-Out" would set the radio to turn off in 30 minutes (- 1 TO 59 SECONDS).

NOTE: TO REMIND YOU THAT A TIME-OUT "COUNT DOWN" IS IN PROGRESS, THE LETTER *C* WILL BE DISPLAYED AFTER THE TIME. TO CANCEL TIME OUT, PRESS THE **<MENU>** KEY UNTIL ***OPERATIONS*** IS DISPLAYED AND THEN RETURN TO THE DESIRED OPERATING MODE.

* BECAUSE THE SERIES II HOME AUTOMATION SYSTEM **DOES NOT TRACK SECONDS, ONLY MINUTES**, IT'S POSSIBLE FOR THE TIMER TO BE OFF BY AS LITTLE AS 1 SECOND AND AS MUCH AS 59 SECONDS, DEPENDING ON WHEN YOU STARTED THE TIME-OUT COUNTER.

EXAMPLE: If the time delay is set for 1 minute, the actual clock time was: 10:22:30 (ten twenty-two and 30 seconds). The command "Selection," "Radio," "Time-Out" would set the radio to turn off in 1 minute, but because there is only 30 seconds left in that minute, it would actually go off in 30 seconds.

9.12 VOICE CONTROL PASSWORD

There may be reasons you would not want someone (a child for example) to have access or make changes to your system. When this situation occurs, you may enter a four (4) digit password using numbers and letters of your choosing. This "password" will be required to exit voice control mode once the menu key has been pressed. Once the menu key has been pressed, you will have approximately 5 to 8 seconds to enter the correct password or the system will return to voice control.

If the password needs to be added or changed, follow these steps:

1. Begin by pressing the **<MENU>** key until ***OPERATIONS*** appears on the display.

2. Press the **<SEL/CANC>** key until ***SYSTEM SET UP*** appears; press the **<ENTER>** key.

3. ***STORE PHONE #*** is now on the display. Press the **<SEL/CANC>** key until ***VOICE CTL. PW.*** appears; press the **<ENTER>** key.

4. ***PASSWORD*** will appear. You may now enter a 1 through 4 character password using both letters and numbers. Press the **<ENTER>** key.

NOTE: ONCE THE PASSWORD HAS BEEN ENTERED IT CANNOT BE REVIEWED, IF IT'S FORGOTTEN YOU MUST CHANGE IT OR RESET THE SYSTEM. If you wish to disable password checking, press the <ENTER> key without entering a password.

9.13 RS-232 (MODEM) ACCESS PASSWORD

The Series II has the ability to be controlled by an RS-232 cable to upload and download information and settings in the system. With the added modem option, in your unit this can even be done from a remote location. There may be reasons you would not want someone to have access or make changes to your system. When this situation occurs, you may enter a four (4) digit password using numbers and letters of your choosing. This "password" will be required to access the RS-232 mode to upload or download information into your system. See Section 12.9 for proper usage and syntax information.

If a password needs to be added or changed, follow these steps:

1. Begin by pressing the **<MENU>** key until ***OPERATIONS*** appears on the display.

2. Press the **<SEL/CANC>** key until ***SYSTEM SET UP*** appears; press the **<ENTER>** key.

3. ***STORE PHONE #*** is now on the display. Press the **<SEL/CANC>** key until ***MODEM ACCESS PW.*** appears; press the **<ENTER>** key.

4. ***PASSWORD*** will appear. You may now enter a four (4) digit password and press the **<ENTER>** key.

NOTE: ONCE THE PASSWORD HAS BEEN ENTERED IT CANNOT BE REVIEWED, IF IT'S FORGOTTEN YOU CAN CHANGE IT. Pressing just the <ENTER> key when a password is requested, will disable modem access (default setting).

9.14 SET CATCH UP TIME

After a power failure your unit has the ability to go "back" in time and reset timers to their correct condition. For example, lights that had been dimmed will be reset to the correct dim level, devices that should have been turned on or off during the power out period will be turned on or off once the power has been restored. If you would like to use this feature, proceed with the following steps:

1. Starting with ***OPERATIONS*** on the display, press the **<SEL/CANC>** key until ***TIME FUNCTIONS*** appears; press the **<ENTER>** key.

2. Press the **<SEL/CANC>** key until ***SET CATCH UP*** appears; press the **<ENTER>** key.

3. ***DISABLE CATCH UP*** is now displayed. If you **do not** want time catch up to function, press the **<ENTER>** key. If you **do** want catch up, press the **<SEL/CANC>** key. ***ENABLE CATCH UP*** is now displayed; press the **<ENTER>** key. ***SET UP TIMERS*** is now displayed, you may now proceed with your next installation step.

9.15 SET DAYLIGHT SAVINGS TIME

The unit also has the ability to automatically adjust for daylight savings time. If you live in an area where it does not exist then you can skip this section, as the default setting is set to IGNORE. If you wish to use this feature, proceed as follows:

1. Starting with ***OPERATIONS*** on the display, press the **<SEL/CANC>** key until ***TIME FUNCTIONS*** appears; press the **<ENTER>** key.

2. Press the **<SEL/CANC>** key until ***DAYLIGHT SAVINGS*** appears; press the **<ENTER>** key.

3. ***IGNORE*** is now displayed. If you **do not** want daylight savings to function press the **<ENTER>** key. If you **do** want daylight savings, press the **<SEL/CANC>** key. ***AUTO ADJUST*** is now displayed; press the **<ENTER>** key. On the first Sunday in April and the last Sunday in October at 2 AM daylight savings will reset the clock. All related timer functions will now react to the new time. ***SET UP TIMERS*** is now displayed, you may now proceed with your next installation step.

NOTE: IF A TIMER IS SET TO START OR STOP BETWEEN 1:00 AM AND 2:00 AM, AND THE TIME IS ADJUSTED BACKWARDS, THE TIMER WILL RUN TWICE. IF A TIMER IS SET TO EXECUTE BETWEEN 2:00 AM AND 3:00 AM, AND THE TIME IS ADJUSTED FORWARDS, THE TIMER WILL NOT EXECUTE.

9.16 MANUAL DAYLIGHT SAVINGS TIME

Manual Daylight Savings Time adjustments can be made by pressing the **<SEL/CANC>** key until ***ADD ONE HOUR*** or ***SUBTRACT ONE HOUR*** appears. Then press the **<ENTER>** key. **DO NOT ADJUST THE TIME FROM 11:00 PM TO 1:00 AM.**

*** * WARNING * ***

ADJUSTING THE TIME FROM 11:00 PM TO 1:00 AM WILL CROSS THE DATE BOUNDARY AND WILL NOT ADJUST THE DATE CORRECTLY.

9.17 SETUP LOCATION FOR SUNRISE AND SUNSET

If you will be tracking sunrise and sunset, you will have to enter the following information for your city or town:

LATITUDE: **A. DEGREES**
B. NORTH OR SOUTH (of the equator)

The information for the above may be obtained from the chart in the back of this manual or by calling your local airport. To proceed, follow the steps below.

1. Press the **<MENU>** key until ***OPERATIONS*** appears on the display; then press the **<SEL/CANC>** key until you see ***TIME FUNCTIONS***. Press the **<ENTER>** key.

2. ***SET UP TIMERS*** now appears; press **<SEL/CANC>** until ***SET LATITUDE*** appears. Press the **<ENTER>** key.

3. ***DEGREES*** is displayed, enter the degrees of latitude that most closely match where you live. Then press the **<ENTER>** key.

4. ***NORTH*** appears on the display. If you are north of the equator, press the **<ENTER>** key. If you are south of the equator, press the **<SEL/CANC>** key, then the **<ENTER>** key.

This Page
Intentionally
Left Blank

SECTION 10 - TEACHING THE SERIES II HOME AUTOMATION SYSTEM

Contents

10.1 OVERVIEW 54
10.2 LEARNING PASSES (OPTIONAL) 56
10.3 MICROPHONE CHECK (REQUIRED) 57
10.4 SET FOCUS (OPTIONAL) 58
10.5 SPEAKER ADAPTION (REQUIRED) 59
10.6 DELETE A USER (OPTIONAL) 59
10.7 TEACH SECTION (REQUIRED) 60
10.8 CHECK AND LEARN (REQUIRED) 62
10.9 SET CHECK AND LEARN (OPTIONAL) 63
10.10 DIALOGUE CHECK (OPTIONAL) 64
10.11 USER CHECK (OPTIONAL) 64
10.12 CHANGE A WORD (OPTIONAL) 65
10.13 DELETE A WORD (OPTIONAL) 65
10.14 SETTING USER NAMES (OPTIONAL) 66
10.15 ENTRY SECURITY (OPTIONAL) 66
10.16 SHORT FORM (OPTIONAL) 67
10.17 AUTO UPDATE (OPTIONAL) 67
10.18 FAST ANSWER (OPTIONAL) 68

***NOTE: THE SERIES II HOME AUTOMATION SYSTEM WILL NOT WORK PROPERLY IF YOU DO NOT DO EACH OF THE REQUIRED STEPS AND DO THEM IN THE CORRECT ORDER.**

10.1 OVERVIEW

This section is the most complex and the most extensive in the Owner's Guide because it's the most important. When we say "complex," we don't mean that the information is difficult to comprehend, but that it's very different from anything you've ever encountered. In this section we instruct you how to teach the Series II home automation system to learn, to recognize the words spoken to it, to distinguish voices and recognize the voice speaking to it.

The system's futuristic software enables the unit to recognize and respond to the voices of up to 4 different Users. The Users are designated User 1 - User 4. These User numbers may be changed to any name you desire (see Section 10.14.) The Series II home automation system is able to distinguish which User is speaking and it will respond appropriately to each User's commands. Users may be added to or deleted from Series II home automation system's memory to correspond with your current requirements. Users may be male or female. A User may speak in any language, using any accent or dialect that is natural.

The Series II home automation system is a highly sophisticated, precisely designed and engineered electronic device. It's a remarkably versatile system, with capabilities unlike any other system you've ever owned. **How well it operates for you is SOLELY DEPENDENT upon proper implementation of the procedures in this section. Each step must be followed in order, and followed exactly so that the Series II home automation system learns correctly.** Once you have mastered the teaching process in this section and the Series II home automation system is properly trained to meet the special needs of your home, you will be able to fully use and appreciate the unique services it can perform.

Your teaching process will be much easier and the operation of the Series II home automation system will be greatly enhanced if you imagine the following situation:

> You've just hired a butler who is slightly hard of hearing, knows no language, and responds best to a natural sounding voice. So your normal speaking voice must be louder than usual and you must speak distinctly when you teach it the words it must recognize to carry out your wishes. You must always speak to it the same way, because it is confused by any changes. **A difference in the sound of a word as you taught it and the sound of that same word when you speak it later would be a change to it.** This is because it is capable of **RECOGNIZING** the words you taught it, but it is **NOT** capable of **UNDERSTANDING** them. What it recognizes is the **word sound** it was taught and which task it is to perform when it hears that **same** sound. For example, you can teach it to turn on the radio when you command it to, but it will not know what a radio is. Therefore, if your voice sounds one way when you say "radio" during the teaching phase and another way when you tell it to turn on the radio, the Series II home automation system will think it is hearing a new word or a voice that it was not trained to obey, and consequently, it will **not** carry out the command.

This situation probably isn't an accurate depiction of any human, but it is a very elementary explanation of the principle of voice recognition technology; the basis of your new Series II home automation system. Awareness of that principle will help you as you teach the Series II home automation system. Please keep it in mind as you follow the procedures detailed in this section.

In the instruction phase below, you will be requested to refer to the Set Up Form. This form indicates the suggested vocabulary to use in the beginning stages of teaching. The key to having the Series II home automation system work properly is to talk to it in the training phase, the same natural way you'd speak if you were calling across a room in a clear, authoritative voice. Don't read the list of commands like a script. If you do, the Series II home automation system will not recognize your words in the voice recognition operation when you speak more normally. Again, **the key is to speak loudly, clearly and naturally** as you teach the Series II home automation system. When you're in the training phase, pretend you are actually speaking to the Series II home automation system from across the room in a real-life situation. Also, please remember that it has

the ability to **RECOGNIZE** words, **NOT UNDERSTAND THEM.** Therefore, to recognize the commands it must be spoken to in the same manner every time. Now, proceed to start teaching the Series II home automation system with this thought in mind, **BE PATIENT.** This is a brand new experience for you. There is no right or wrong way to go about this teaching process. Success comes with experience, and you can have a great deal of fun on your way to very satisfying results.

Please follow these recommendations as you are teaching the Series II home automation system for the first time:

1. Use no more than 4 or 5 lamps and appliances, and no more than 4 or 5 telephone numbers. This will enable you and the Series II home automation system to become familiar with each other before you add all the words you will want it to recognize. Since it may confuse or incorrectly recognize words, you will need to learn which words it can recognize better than others. For instance, "On" and "Off" may tend to be confusing words to the Series II home automation system. With the distinction of **"On"** and **"Off, please,"** confusion is minimal. The confusion in word recognition will vary from User to User, and it happens only in the beginning as Users are first experiencing the system.

2. Position yourself no more than 5 feet away from the Series II home automation system until you have mastered the teaching process. After you are experienced in teaching, position yourself half the distance between the unit and the place where you'll generally be giving voice commands. For instance, if the Series II home automation system will be in the corner of a 20-foot room, position yourself 10-feet away from it when you're teaching it. This will give it the greatest distance of flexibility to "hear" you.

3. When speaking words from the vocabulary list, always speak naturally, but loudly and clearly, as if you were talking across the room to a person slightly hard of hearing.

4. Use single word commands of 1 to 4 syllables or short phrases (such as "music system" or "air conditioner") that vary as much as possible in sound, and avoid longer phrases as they are more difficult for the Series II home automation system to recognize.

5. Differ the names of your devices as much as possible. For instance, instead of "TV" and "toaster," try using "TV set" and "toaster oven." This type of variation will improve word recognition, especially from a distance, when there is noise in the room.

6. **DON'T FIGHT THE SYSTEM.** When you're in the Teach Section phase or the Check and Learn phase, the Series II home automation system may confuse one word with another, even though they sound completely different to you. For instance, words as dissimilar as "ash" and "Mississippi" may sound the same to the Series II home automation system. If it cannot learn certain words, change them to something it can recognize more easily.

The teaching process is located in the **LEARNING SECTION** of the system, which is divided into 2 major areas, **VOICE SETUP** and **VOICE TRAIN.** Please refer to the **Series II home automation system Menu Flow Chart** and **Menu Descriptions** at the back of this Owner's Guide.

Many menu items in these sections are optional and may be skipped in the training process. As you come to each of these sections in the guide, you'll see they are marked either **OPTIONAL** or **REQUIRED.** Of the 17 menu items possible, only 4 are **absolutely required** in order for the Series II home automation system to function. They are, **Microphone Check, Speaker Adaption, Teach Section** and **Check and Learn.** All the other menu items are optional and may be skipped.

NOTE: THE LAST USER TO USE ANY ITEM ON THE MENU WILL APPEAR ON THE DISPLAY PANEL WHEN THIS MENU ITEM IS ENTERED AGAIN.

To explain the procedure for identifying yourself, we will use the **Teach Section** of the **VOICE TRAIN** menu for our example. **EXAMPLE:** You have selected the **Teach Section** item on the menu and ***USER 1*** appears. This means that User 1 was the last person to use this part of the menu. If you are User 1, press the **<ENTER>** key. If you are User 2-4, press the **<SEL/CANC>** key until your User number appears, then press the **<ENTER>** key and you will enter this menu selection. This procedure applies to ALL MENU items in the **LEARNING SECTION.**

LEARNING PASSES - This refers to how many times you must say each word when you are training the Series II home automation system. Generally only 1 pass, or saying the word once, is sufficient. Because of their voice quality or noise level in the room, some people may require 2 passes. The DEFAULT is 1 pass.

MICROPHONE CHECK - This is used to test the sensitivity setting of the noise level in the room where the Series II home automation system will be set up. Microphone check is used in the Balancing Procedure and Initial Set Up of your unit. **This section is required.**

SET FOCUS - This is a tolerance setting for how distinctly you must speak for the Series II home automation system to recognize your words. The higher the focus, the more precisely you must speak; the lower the focus, the more relaxed you can speak. Some experimentation may be necessary to determine what level is best for you. The DEFAULT setting is 15. Raising the setting to 20 requires you to speak more distinctly; lowering it to 10 permits you to speak less distinctly. Generally, this setting is established when you first set up your system and does not require additional changes. An exception to that is, if you have a cold that alters your normal voice, you would lower the focus setting during that brief period, and after your normal voice returns, change the focus to its usual setting.

SPEAKER ADAPTION - In this phase, the Series II is learning to recognize the Users' voices. It will use this capability to distinguish which one of the Users is speaking. **This speaker adaption phase is required.** If you skip this phase, the Series II home automation system will not be able to proceed to the **Teach Section.** Before attempting to teach individual words, each user **must first** go through this **Speaker Adaption** phase.

DELETE A USER - This area is used to remove a User from the Series II home automation system memory bank. For example, if you have a User vacancy in your system, you may wish to set up a visitor's voice only to demonstrate the Series II home automation system power of voice recognition, but do not want the visitor's voice to remain in the system. To do this, use the Delete a User procedure to erase memory of the visitor's voice.

We will now proceed with the procedures for **Learning Passes**, the first part of the **VOICE SETUP.**

10.2 LEARNING PASSES (OPTIONAL)

This menu selection allows you to determine whether you will make 1 or 2 passes, or repetition of words, in the **Teach Section** of the system. The DEFAULT setting for this is 1 pass. You may skip this section if you wish; however, if you want to make a change, proceed with the following steps:

1. Begin by pressing the **<MENU>** key until ***OPERATIONS*** appears on the display.
2. When ***OPERATIONS*** appears, press the **<SEL/CANC>** key until ***LEARNING SECTION*** appears; then press the **<ENTER>** key.

3. ***VOICE TRAIN*** is now on the display. Press the **<SEL/CANC>** key until ***VOICE SET UP*** appears, then press the **<ENTER>** key.

4. ***SPEAKER ADAPTION*** is now on the display. Press the **<SEL/CANC>** key until ***SET PASSES 1-2*** appears, then press the **<ENTER>** key.

5. ***TRAIN 1 PASS*** appears. To switch from 1 pass to 2 passes, press the **<SEL/CANC>** key; the display now shows ***TRAIN 2 PASSES*.** Press the **<ENTER>** key and you will have 2 training passes when you set up voice in Section 10.7.

10.3 MICROPHONE CHECK (REQUIRED)

THIS SECTION IS MOST IMPORTANT (IT IS WHERE MOST PEOPLE GO WRONG!!

This section will reconfirm the balancing you did when you set up the Series II home automation system. It will check your voice for proper volume when you speak to it. **CHECK ALL WORDS SPOKEN FOR THE CORRECT NUMBER OF ASTERISKS**. (See below). To proceed with Microphone Check, use the following steps:

1. Begin with ***OPERATIONS*** on the display; press the **<SEL/CANC>** key until ***LEARNING SECTION*** appears and then press the **<ENTER>** key.

2. ***TRAIN SECTION*** is now on the display. Press the **<SEL/CANC>** key until ***VOICE SETUP*** appears; press the **<ENTER>** key.

3. ***SPEAKER ADAPTION*** now appears. Press the **<SEL/CANC>** key until ***MICROPHONE CHECK*** appears; press the **<ENTER>** key.

4. You will see ***SAY WORD NOW! "*"*.** If the TV and radio are on at proper levels, no asterisk should appear on the right side of the display panel. An asterisk should appear **only** when you say a word or phrase; then * ********** * should appear. This is a type of gauge that measures how well your words are being received by the system. The **more** asterisks, the better the Series II home automation system is hearing you. It's not recognizing the word at this point, just making sure your voice is loud enough and has enough information for it to pick up your words. **EACH WORD SHOULD BE CHECKED SEVERAL TIMES.**

NOTE: When you say the entry word (the name you have given the Series II home automation system) the display should show NO LESS THAN 7 ASTERISKS; for all other commands, devices, or names, no less than 4 asterisks should appear.

NOTE: THE RED SENSITIVITY LIGHT ON THE FRONT OF THE SERIES II HOME AUTOMATION SYSTEM SHOULD BLINK ONCE FOR EVERY SYLLABLE OF THE WORDS YOU SPEAK. If you say **"alarm,"** the light should blink twice; with **"lamp"** it should blink once; with **"TV set"** it should blink three times. If the light is not blinking once per syllable, you could have trouble making the Series II home automation system recognize your words. You should try, **(1)** speaking louder and/or more distinctly; **(2)** raising the sensitivity level slightly; and/or **(3)** moving a little closer to the unit when you give the command.

ADDITIONAL TIPS

Please note that if the Series II home automation system is trained properly, it will not be touchy about recognizing commands, its own name, etc. Some symptoms of training errors include repeated "false tripping" (answering when it was not addressed), difficulty in getting the system's attention when its name is called, or confusion between device names or commands that result in errors when the unit is in use.

The solution to any of the above cases is very easy. In the Microphone Check section, it is vital that at least 4 asterisks (****) are displayed after saying any device name or command. The entry word requires at least 7 stars asterisks (*******). If you are having trouble with a given word, just go to the Microphone Check section and say the word several times the way you trained it in the Teach Section. If you do not consistently achieve the correct number of asterisks when a given word is said, it is likely that the word was taught improperly in the Teach Section too.

EXAMPLE: Let's say that when you ask the Series II home automation system to "dim" a lamp, it responds incorrectly (with "on" for example). When you check the word "dim" in the Microphone Check section you find that you are only getting 3 stars (***) about 75% of the time, rather than the 4 stars required. At this point, you can either try saying the word a bit differently (slightly more volume, stretching the word, etc.) or just change the word to "dimmer" instead of just "dim." The key here is to find the word or words which allow you to routinely get the correct number of stars, then to train that name or command into the Series II home automation system replacing the one that gave you trouble.

This step is unique to each individual. What works for one person will not necessarily be best for another. Find the word or words which work best for you.

10.4 SET FOCUS (OPTIONAL)

Focus should be set after SPEAKER ADAPTION. The DEFAULT setting for **Set Focus** is 15. If you want to change it, follow these steps:

1. With ***OPERATIONS*** on the display, press the **<SEL/CANC>** key until ***LEARNING SECTION*** appears; press the **<ENTER>** key.

2. ***TRAIN SECTION*** is now on the display. Press the **<SEL/CANC>** key until ***VOICE SETUP*** appears; press the **<ENTER>** key.

3. ***SPEAKER ADAPTION*** appears; press the **<SEL/CANC>** key until ***SET FOCUS*** appears, then press the **<ENTER>** key. ***USER 1*** appears. This means that User 1 was the last person to use this part of the menu. If you are User 1, so press the **<ENTER>** key. If you are User 2-4, press the **<SEL/CANC>** key until your User number appears, then press the **<ENTER>** key and you will enter this section.

4. ***FOCUS IS: 15*** appears. If you press the **<ENTER>** key at this time, ***PHONE FOCUS:18*** will appear. These two menu items are the current focus, or accuracy settings for your system's recognition of your words. To change either setting, press the **<SEL/CANC>** key and the numbers (15 or 18) will disappear from the display. At that point, enter any new number you wish.

EXAMPLE: To enter the number **20**, press the **<2>** key and the **<0>** key; the number **20** will appear on the display. If you make a mistake, press the **<SEL/CANC>** key and enter the correct number.

NOTE: THE PHONE FOCUS SHOULD BE RAISED IF, WHEN YOU ARE USING YOUR UNIT IN THE SPEAKER PHONE MODE, THE SERIES II HOME AUTOMATION SYSTEM FALSE TRIPS AND INTERRUPTS YOUR CONVERSATION TOO FREQUENTLY.

5. Once the desired number has been entered, press the **<ENTER>** key. The new focus will be accepted for that User and ***USER 1*** will appear on the display. You may now proceed to any other menu choice in the **LEARNING SECTION** by pressing the **<MENU>** key once.

10.5 SPEAKER ADAPTION (REQUIRED)

The **Speaker Adaption** phase is very important. Unless you have accomplished this phase for **each User**, the **Teach Section** will not function properly. During this phase of training, the room should be totally quiet with no one speaking except the User who is training the Series II home automation system. Please refer to **NOTE,** Section 10.3, about the blinking red sensitivity light and keep this information in mind as you proceed with Speaker Adaption.

NOTE: YOU MUST COMPLETE THIS SECTION BEFORE TEACHING THE SERIES II HOME AUTOMATION SYSTEM BUT DO NOT GO BACK INTO IT AFTER TEACHING IT OR THE WORDS YOU TAUGHT IT WILL BE ERASED FROM ITS MEMORY. A DIFFERENT USER, HOWEVER, MAY USE SPEAKER ADAPTION WITHOUT AFFECTING OTHER USERS' TRAINING.

1. Starting with ***OPERATIONS*** on the display, press the **<SEL/CANC>** key until ***LEARNING SECTION*** appears, then press the **<ENTER>** key.

2. ***TRAIN SECTION*** now appears; press the **<SEL/CANC>** key until ***VOICE SETUP*** appears and then press the **<ENTER>** key.

3. Now ***SPEAKER ADAPTION*** appears; press the **<ENTER>** key. ***USER 1*** appears. This means that User 1 was the last person to use this part of the menu. If you are User 1, press the **<ENTER>** key. If you are User 2-4, press the **<SEL/CANC>** key until your User number appears, then press the **<ENTER>** key to choose this part of the menu.

4. ***ARE YOU SURE?*** now appears; press the **<NO>** or **<MENU>** keys if you do not wish to enter speaker adaption. Press the **<YES>** key if you wish to begin.

5. ***SAY WORD NOW!*** on the display is a request for you to speak words or phrases to the Series II home automation system so it can learn to recognize your voice. We recommend that you start by speaking the 10 specific words listed below, **plus** the days of the week, the months of the year, and then, if necessary, the letters of the alphabet, because they give the widest range of the sound and flexibility of your voice. If you wish to use other words, do so **after** you have become familiar with the system. Speak each word **AFTER** the "*" disappears from the display.

   1. Air Conditioner
   2. Mood Lighting
   3. Airplane
   4. Typewriter
   5. On
   6. Table lamp
   7. Television
   8. Six
   9. Wednesday
   10. April

6. When enough words or phrases have been entered, the Series II home automation system will AUTOMATICALLY end the SPEAKER ADAPTION phase. **DO NOT STOP SPEAKING** until the Series II home automation system **(by itself)** exits the SPEAKER ADAPTION process. The amount of words will vary from person to person. **Let the** Series II home automation system **decide it is done.**

10.6 DELETE A USER (OPTIONAL)

If you no longer want the Series II home automation system to recognize any of the 4 Users, the following procedure may be used to delete that User:

1. With ***OPERATIONS*** displayed, press the **<SEL/CANC>** key until ***LEARNING SECTION*** appears; press the **<ENTER>** key.

2. ***TRAIN SECTION*** is now on the display. Press the **<SEL/CANC>** key until ***VOICE SETUP*** appears; press the **<ENTER>** key.

3. ***SPEAKER ADAPTION*** appears; press the **<SEL/CANC>** key until ***DELETE A USER*** appears, then press the **<ENTER>** key.

4. ***USER 1?*** appears. Press the **<SEL/CANC>** key until you see the number of the User (1 - 2) you want to remove from the Series II home automation system memory; at that point, press the **<ENTER>** key.

5. ***ARE YOU SURE?*** will appear. This gives you an opportunity to reconsider. If you change your mind about deleting that User, you may press the **<NO>** key or the **<MENU>** key without losing the system's memory of that User. If you are certain you want to delete that User, press the **<YES>** key, then the **<ENTER>** key. All memory and recognition of that User will be removed.

10.7 TEACH SECTION (REQUIRED)

Before you actually start to teach the Series II home automation system new words, it will be helpful to scroll through the menu to familiarize yourself with the vocabulary entry sections available. As you do this, notice their corresponding parts on the Set Up Form for Vocabularies.

1. With ***OPERATIONS*** on the display, press the **<SEL/CANC>** key until ***LEARNING SECTION*** appears; press the **<ENTER>** key.

2. ***VOICE TRAIN*** now appears; press the **<ENTER>** key.

3. Press the **<SEL/CANC>** key until ***TEACH SECTION*** appears; then press the **<ENTER>** key. Next, select proper User.

4. ***COMMANDS*** is on the display. This menu selection corresponds to the Commands Section of 9 words on your Set Up Form for Vocabularies.

5. Press the **<SEL/CANC>** key and ***ALARM*** will appear. This is the part of the system where you will enter your Alarm Vocabulary.

6. Press the **<SEL/CANC>** key and you will see ***DEVICES*** on the display. This is the entry point of the Devices vocabulary; its corresponding part on the form is Set Up Devices, with Devices 1 through 42 reserved for voice command.

7. Pressing the **<SEL/CANC>** key will bring up ***TELEPHONE*** on the display; here you will enter your Telephone Vocabulary.

8. Press the **<SEL/CANC>** key once more and ***COMMANDS*** will return to the display.

Now we will train the first vocabulary section (Commands) which contains the 9 words on your SetUp Form for vocabularies. REMINDER: The room must be as quiet as possible, including entertainment units, children and pets. Facing your unit, position yourself about 8-feet away from it. Speak in a loud, clear voice and speak normally, not as if you're reading from a script. **Do not press the <ENTER> key until you are completely ready to start the training process.** Once you do press the **<ENTER>** key, the Series II home automation system will immediately start learning. Before you start, please refer again to **NOTE,** Section 10.3, about the blinking red sensitivity light and keep this information in mind as you proceed to teach the Series II home automation system.

NOTE: AFTER YOU HAVE TRAINED **EACH** VOCABULARY SECTION OF THE SERIES II HOME AUTOMATION SYSTEM, AND YOU WISH TO ADD OR CHANGE A WORD IN ANY SECTION, IT ISN'T NECESSARY TO REPEAT THE TEACH SECTION; SIMPLY FOLLOW THE PROCEDURE IN SECTION 10.12.

1. Press the **<ENTER>** key; Command 1, ***SAY ENTRY***, will appear. This is requesting you to say the name of the Series II home automation system. For our example, if the name is Selection, clearly say, **"Selection."**

2. As soon as you've said **"Selection,"** ***SAY KILLWORD*** will appear on the display. At this point, you may teach the Series II home automation system to recognize and **IGNORE** any sound you wish. For example, if you know the barking of your dog or a person's whistling may tend to activate your system. By entering such sounds in this "Kill" part of the system, you will teach the Series II home automation system to recognize and ignore them. You may wish to reserve this vocabulary command for later training and continue with the third command word. If so, simply **"whistle"** and wait for the next command word to appear on the display.

NOTE: IF MORE THAN 1 USER WILL BE OPERATING THE SERIES II HOME AUTOMATION SYSTEM, EACH USER MUST CALL THE SERIES II HOME AUTOMATION SYSTEM BY A DIFFERENT NAME. SINCE THE ENTRY WORD IS ALWAYS THE SYSTEMS NAME, THIS WILL HELP YOUR SERIES II HOME AUTOMATION SYSTEM KNOW WHICH USER IS SPEAKING TO IT.

3. Next you'll see ***SAY NO*** on the display. Say the word **"No."**

4. Continue to say each word loudly and clearly after it appears on the display.

5. Once you have said the last word in that vocabulary, you will be asked to repeat each word in order. The Series II home automation system is now AUTOMATICALLY checking to determine whether it's going to have any problems with the words you have just spoken. If a conflict in recognition is encountered, then it will ask you to restate the word or words it is having trouble understanding. If there are no problems encountered, you will go through the check list once. The system will display *CHANGE THIS WORD* if the system cannot distinguish it from the other words that were trained in the current section. In this case, a COMPLETELY different way of saying the word should be used. For example, "The Fan" instead of "Fan" or "Stereo System" instead of "Radio." It is recommended that you write down an alternative phrase for each word you teach the system. This is especially important with short words. If problems are encountered you will continue to go through the list until there are no mistakes.

6. Once all words in the vocabulary have been accepted, you will see ***COMMANDS*** on the display. This means you have completed setting up the Commands Vocabulary.

NOTE: IF YOU MAKE A MISTAKE OR SIMPLY WANT TO RE-DO ANY COMMAND, YOU CAN PRESS THE **<ENTER>** KEY AND REPEAT THE PROCEDURES IN ORDER, OR PROCEED TO CHANGE A WORD. IF YOU ARE SATISFIED WITH YOUR ENTRIES IN THE COMMANDS VOCABULARY AND ARE READY TO TRAIN THE OTHER VOCABULARY SECTIONS, PROCEED WITH THE NEXT STEP.

7. Press the **<SEL/CANC>** key; ***ALARM*** will appear on the display. Refer to the Set Up Form for Vocabularies - Alarm. Press the **<ENTER>** key and proceed to train the system's Alarm Vocabulary by saying each word after it appears on the display. When ***SAY PASSWORD*** appears, you may say any word, phrase or sound you choose: a whistle, the words "It's me," or any imaginative words you will remember. You must remember the word(s) or sound you enter here; you will have to repeat it exactly as you taught it to properly identify yourself

when you enter your home and want to deactivate the Intrusion Detection System.

8. Proceed to teach the Series II home automation system the rest of the vocabulary sections following the above procedures.

NOTE: In the Devices Vocabulary, the first 3 positions are reserved for **NO**, **ALARM** and **TELEPHONE**. The 4th position is for Device #1, the 5th for Device #2, and so forth. You will set up this vocabulary just as you did the others. First, the Series II home automation system will ask how many devices you have. For example, if you have set up only a lamp, a TV, and a radio, when ***DEVICES:*** appears on the display, enter the number 3. Now refer to the Set Up Form for Devices. When ***SAY DEVICE 1*** appears, say the name of the device you set up as Device #1. If you set up a lamp as Device #1, you might say, **"Table lamp."**

9. These same procedures will hold true for the Telephone Vocabulary section. When ***NAMES:*** appears on the display, the Series II home automation system is asking how many names you wish to enter, or store in the system. Each User may enter 16 names. The names will have their respective telephone numbers entered (see Section 9.6). If you want to enter only 4 names now, enter the number 4. You may add other names and numbers later (see Section 10.12); remember to update your Set Up Form for Telephone Vocabulary accordingly.

Once you have finished teaching the Series II home automation system all the vocabulary sections, you are ready to verify that it has learned them properly. Proceed to Section 10.8.

10.8 CHECK AND LEARN (REQUIRED)

In this section you will verify that the Series II home automation system has learned the words you taught it in the preceding section. It is also possible for you to instruct it to improve its learning or recognition, of any particular word you have taught it. There is no right or wrong way to do this. It's something that you will get a feel for by experimentation.

Use the Alpha Select keys, (**YES**, **NO** and **UPDATE**), in the upper right-hand corner of the keyboard (see Figure 6-2). We will ask the Series II home automation system to display the various words you have taught it. When ***SAY WORD NOW*** appears on the display, say one of the words in the corresponding vocabulary section. If it learned properly, the correct word will be displayed, press the **<YES>** key. If an incorrect word is displayed, press the **<NO>** key; ***NO UPDATE*** will appear, followed by ***SAY WORD NOW***. Repeating the procedure, say the word until it appears on the display. Then press the **<UPDATE>** key, which means it was the correct word but you want the Series II home automation system to improve the learning of it. ***UPDATING...*** will appear; it's recording the word as you last spoke it.

EXAMPLE: You said **"On"** in the Commands Vocabulary and the Series II home automation system missed it the first 2 times, but got it on the third attempt. After each of the first two attempts, press the **<NO>** key. On the third attempt, when Series II home automation system responded correctly, press the **<UPDATE>** key. In this way it will learn **"On"** better. If it got a word correctly the first time or got it 4 out of 5 times, press the **<YES>** key as there would be no need to improve the recognition of that word.

This will be one of the most often used parts of your system, because as you become more familiar with the Series II home automation system, you will speak more naturally to it. It will probably be necessary to retrain it over the first few weeks as you become more acquainted with it and it with you. The following are detailed instructions for the **Check and Learn Section:**

1. With ***OPERATIONS*** on the display, press the **<SEL/CANC>** key until ***LEARNING SECTION*** appears; press the **<ENTER>** key.

2. ***VOICE TRAIN*** is on the display; press the **<ENTER>** key.

3. ***CHECK & LEARN*** now appears; press the **<ENTER>** key.

4. ***USER 1*** appears; using the **<SEL/CANC>** key, select your User number, then press the **<ENTER>** key.

5. ***COMMANDS*** is now on the display; this is the Commands Vocabulary section. Press the **<ENTER>** key.

6. The display shows ***SAY WORD NOW!*.** Say any word you choose from the Commands Section. In this case, say **"Selection."** ***ENTRY ?*** should appear on the display. Your system's name will appear as ***ENTRY*** when its recognizes its name correctly (other commands it recognizes will appear as the command word itself). Press the **<YES>** key and ***NO UPDATE*** will be displayed. Then ***SAY WORD NOW*** will reappear on the display; say another word. If an incorrect word appears, press the **<NO>** key. ***NO UPDATE*** will appear on the display. Try the word again. If the display shows the correct word this time, press the **<UPDATE>** key, which instructs the Series II home automation system to immediately relearn that word. ***UPDATING...*** will be displayed, which means the Series II home automation system is recording in the recognition system, the word as you just spoke it. Now select another command word and continue the procedure until you have verified that it has properly learned all words in this vocabulary section.

NOTE: If the Series II home automation system has difficulty identifying any particular word after you have said it a few times, or if it recognizes it only every second or third time you say it, be sure to **update** that word. As you see, you are both checking the words it already knows and instructing it to improve the learning of the words it's having trouble with. Once you are convinced that it has properly learned the Commands Vocabulary, press the **<MENU>** key and the display will show ***CHECK & LEARN*** again. You may now go to any of the other vocabulary sections and do **Check and Learn.**

10.9 SET CHECK AND LEARN (OPTIONAL)

This section allows you to choose an alternate way to verify and update words you have taught the Series II home automation system. Instead of using the keyboard to instruct **NO, YES** and **UPDATE,** in this section you may choose to instruct by VOICE. **This VOICE option is for experienced Users only, and it requires absolute silence in the room throughout the procedure.**

1. With ***OPERATIONS*** on the display, press the **<SEL/CANC>** key. ***LEARNING SECTION*** will appear; press the **<ENTER>** key.

2. ***VOICE TRAIN*** will appear. Press the **<SEL/CANC>** key until ***VOICE SETUP*** will appear; press the **<ENTER>** key.

3. ***SPEAKER ADAPTION*** will appear. Press the **<SEL/CANC>** key until ***SET CHECK & LEARN*** appears; press the **<ENTER>** key.

4. ***UPDATE BY VOICE?*** now appears. If this is your choice of method for checking your system's learning process, press the **<ENTER>** key. If you decide not to use this method, press the **<SEL/CANC>** key and ***UPDATE BY KEYBD?*** will appear; press the **<ENTER>** key. Either choice returns you to the top of the **VOICE SETUP** menu, with ***SPEAKER ADAPTION*** appearing on the display. To proceed with the VOICE checking method, follow Step 5.

5. Now follow Steps 1 through 6 of **Check and Learn**, Section 10.8, with the following exceptions in Step 6: Instead of using the keyboard to instruct **NO** or **YES**, **you will say the words, "No" or "Yes"** at the appropriate times. Instead of pressing the **<UPDATE>** key to instruct the Series II home automation system to improve the learning of any word, when your word finally appears correctly on the display, you will **REMAIN COMPLETELY SILENT**. After 1 or 2 seconds, ***UPDATING...*** will appear on the display; your word as you last spoke it is being recorded in the system's recognition system.

REMINDER: This method of verifying and updating words is for experienced Users only and COMPLETE SILENCE in the room during the procedure is essential.

NOTE: This is a reminder not to fight with the Series II home automation system. It simply has trouble with some words and you must understand that at the onset. For example, in the Commands Vocabulary, we used the words "ON" and "OFF PLEASE." This is because the Series II home automation system may have trouble recognizing the difference between the words "ON" and "OFF." To it, these words are too close in sound to differentiate accurately every time. However, if you say "ON" and "OFF PLEASE," it rarely makes a mistake. As you set up your vocabularies, be alert to similar sounding words. You may have to slightly modify your original words so the Series II home automation system will more quickly recognize them. If it has considerable difficulty recognizing any word, rather than continuing to try to teach it that word, select a new one and retrain it. Retraining will be covered in Section 10.12.

Your ENTRY word has a focus setting 50% higher than all other words in the system. As a result, you may need to update your ENTRY word several times. See Section 10.4 for explanation.

10.10 DIALOGUE CHECK (OPTIONAL)

With only one exception, the process for checking dialogue is the same as that for using Voice Control. The only difference is that in Dialogue Check, lights and appliances will not actually turn ON and OFF while you go through the process of talking to and receiving responses from the Series II home automation system. For instance, when you give it the series of commands **"Selection/table lamp/on,"** the lamp will **NOT** turn ON, but those words **will appear** on the display to let you know the recognition system is working properly. The two exceptions to this are the ALARM and the RS-232 port. The alarm will be activated by checking it in Dialogue Check. If you wish to check it, be certain to deactivate it afterwards. Because this is the only difference between the procedure for Dialogue Check and for Voice Control Check, the detailed explanation will be covered only once; please refer to the step-by-step instructions in Section 11.1.

10.11 USER CHECK (OPTIONAL)

IF YOU'RE GOING TO USE THE SERIES II HOME AUTOMATION SYSTEM AS A "MULTI-USER" SYSTEM (MORE THAN 1 PERSON AT A TIME WILL BE OPERATING IT), THIS SECTION IS IMPORTANT. You must be sure that each User is properly identified by the Series II home automation system so it will not confuse one person's words with another's words. This is done in the **User Check Section**. After every User has completed the training procedures in preceding sections, go into the **User Check Section** and follow these steps:

1. With ***OPERATIONS*** on the display, press the **<SEL/CANC>** key until ***LEARNING SECTION*** appears; press the **<ENTER>** key.

2. ***VOICE TRAIN*** now appears; press the **<ENTER>** key.

3. Press the **<SEL/CANC>** key until ***USER CHECK*** appears; press the **<ENTER>** key.

4. ***SAY WORD NOW!*** will appear. At this point, any one of the Users who have trained the system would call out the system's name in a loud clear voice. Once the name has been called, that particular User's number should appear on the display for approximately 1 second; then ***SAY WORD NOW!*** will appear again. The next User should identify himself by calling out the name it has given the Series II home automation system, and so forth.

If the Series II home automation system incorrectly selects the User, you may have to go into the **Change A Word Section** and change his/her name (or names). You could also go into the **Check and Learn Section** and retrain or improve your system's recognition of the name you're calling it. The greater the difference in the entry word each User teaches the Series II home automation system, the better success there will be in the **User Check Section.** It is most important that in this section the Series II home automation system properly selects the correct User every time, as this will affect its ability to properly recognize the other words you have taught it.

10.12 CHANGE A WORD (OPTIONAL)

When you change or **ADD** words to your system, position yourself about 8-feet from your unit, facing it; speak clearly, loudly, and normally.

1. With ***OPERATIONS*** on the display, press the **<SEL/CANC>** key until ***LEARNING SECTION*** appears; press the **<ENTER>** key.

2. ***VOICE TRAIN*** is on the display; press the **<ENTER>** key.

3. Press the **<SEL/CANC>** key until ***CHANGE A WORD*** appears; then press the **<ENTER>** key. Select the proper User number.

4. ***COMMANDS*** now appears. Press the **<SEL/CANC>** key to scroll through the menu until you come to the vocabulary section in which you want to change or add a word.

EXAMPLE: If you want to change the Password in the Alarm Vocabulary, press the **<SEL/CANC>** key until ***ALARM*** appears on the display. When you see ***ALARM***, press the **<ENTER>** key; ***NO*** will appear. By pressing the **<SEL/CANC>** key you will see in turn each word in this vocabulary section. When you come to the word you want to change, press the **<ENTER>** key; ***SAY WORD NOW*** will appear. Immediately say the word you want to **substitute** for the word already in the system. Your new word instantly replaces your original entry.

10.13 DELETE A WORD (OPTIONAL)

You may wish to delete a word from your system. For example, you may decide to let the Series II home automation system's timer mechanism turn the coffee pot ON and OFF, instead of your original set up of this function, using voice command.

The procedure to delete a word is very similar to the procedure for **Change A Word.** When you see ***DELETE A WORD*** on the menu, press the **<ENTER>** key. Follow User number entry procedure, then press the **<SEL/CANC>** key to scroll through each vocabulary section. When you reach the section where you want to delete a word, press the **<ENTER>** key. Use the **<SEL/CANC>** key, scroll to the word you want to delete; then press the **<ENTER>** key. ***ARE YOU SURE?*** will appear on the display. If you are certain you want to delete the word, then the **<YES>** key. Next, press the **<ENTER>** key, and that word will be removed from your system's memory. If you do not wish to delete the word, press the **<SEL/CANC>** key or the **<MENU>** key, and the word will remain in the memory.

10.14 SETTING USER NAMES (OPTIONAL)

As described at the beginning of this section, each User is identified by a User code, or number. In the Voice Control mode of operation, ***USER 1*** will appear on the display if User 1 accesses the system, and the same applies to Users 2-4. It's possible to change this identification code from a number to the User's name. For instance, instead of the panel displaying ***USER 1***, it could display ***HI BRIAN***, which is more personalized. To make the change for each User, proceed with the following steps:

1. With ***OPERATIONS*** on the display, press the **<SEL/CANC>** key until ***LEARNING SECTION*** appears; press the **<ENTER>** key.

2. ***VOICE TRAIN*** now appears. Press the **<SEL/CANC>** key until ***VOICE SETUP*** is on the display; press the **<ENTER>** key.

3. Press the **<SEL/CANC>** key until ***SET USER NAMES*** appears; press the **<ENTER>** key.

4. ***USER 1: USER 1*** is now displayed. Let's assume for our example that User 1 will keep their number code; User 2 will change to a name. Since this is the display code User 1 wants, press the **<ENTER>** key to accept it.

5. You will now see ***USER 2: USER 2***. Press the **<SEL/CANC>** key and ***USER 2: *** will appear. You are now ready to spell the name of that User, using the Alpha Display section of the keyboard. See Section 12.3 for instructions.

6. Once the correct Alpha Display name appears, press the **<ENTER>** key to accept the new information. From now on, that name will appear on the display when User 2 accesses the system in the Voice Control mode.

10.15 ENTRY SECURITY (OPTIONAL)

This feature can provide an additional level of recognition by the Series II home automation system of its name (Entry word) before it will respond to you. The default setting is set to "0" or off position. The range of selection is 1 to 10. The higher the number, the more precise the entry word must be spoken before it will be accepted by the Series II home automation system. This feature can be used for security or to help reduce "False Trips." To change default, proceed as follows:

1. With ***OPERATIONS*** on the display, press the **<SEL/CANC>** key until ***LEARNING SECTION*** appears; press the **<ENTER>** key.

2. ***VOICE TRAIN*** now appears. Press the **<SEL/CANC>** key until ***VOICE SETUP*** is on the display; press the **<ENTER>** key.

3. Press the **<SEL/CANC>** key until ***TIGHT ON ENTRY WD*** appears; then press the **<ENTER>** key.

4. ***TIGHT IS*** is now shown, press the **<SEL/CANC>** key, enter the desired security level (1-10), then press the **<ENTER>** key.

10.16 SHORT FORM (OPTIONAL)

The **SHORT FORM** allows the Series II home automation system to respond to and act upon a 2 step command sequence, instead of the normal 3 step approach. This allows the user to operate the Series II home automation system with fewer spoken words and faster, more accurate operation of devices. This "Short Form" feature has auto reverse memory for

each device used by it. Correct use of this feature is explained in Section 11.1.3. To change the default, proceed as follows:

1. With ***OPERATIONS*** on the display, press the **<SEL/CANC>** key until ***LEARNING SECTION*** appears; press the **<ENTER>** key.

2. ***VOICE TRAIN*** now appears. Press the **<SEL/CANC>** key until ***VOICE SETUP*** is on the display; press the **<ENTER>** key.

3. Press the **<SEL/CANC>** key until ***SHORT FORM*** appears; then press the **<ENTER>** key.

4. ***SHORT FORM NO*** appears; to use the Short Form method of operation, press the **<SEL/CANC>** key until ***SHORT FORM YES*** appears; then press the **<ENTER>** key.

* AUTO REVERSE MEMORY: Remembers the last time that device was used by the Series II home automation system and the position it was left in. All devices are assumed to start in the OFF position.

10.17 AUTO UPDATE (OPTIONAL)

In VOICE CONTROL mode, the Series II home automation system has the ability when told it has made an incorrect selection of a word (by you saying "NO"), to "Auto Correct" or automatically drop that chosen word from the vocabulary list and instantly seek and display the **next correct response** (see Section 11.1.4). The Series II is set to Auto Update, NO. If you wish to enable Auto Update, do as follows:

1. With ***OPERATIONS*** on the display, press the **<SEL/CANC>** key until ***LEARNING SECTION*** appears; press the **<ENTER>** key.

2. ***VOICE TRAIN*** now appears. Press the **<SEL/CANC>** key until ***VOICE SETUP*** is on the display; press the **<ENTER>** key.

3. Press the **<SEL/CANC>** key until ***AUTO UPDATE*** appears; then press the **<ENTER>** key.

4. ***UPDATE: NO*** appears; to use the Auto Update feature, press the **<SEL/CANC>** key until ***UPDATE: YES*** appears; then press the **<ENTER>** key.

You have just completed the **LEARNING SECTION** of the Series II home automation system. If you have followed all procedures properly, you are ready to experience the exciting world of VOICE CONTROL.

10.18 FAST ANSWER (OPTIONAL)

In VOICE CONTROL mode, the Series II home automation system has the ability when told to answer the phone on one word (His Name) If you wish to enable this feature than do as follows:

1. With ***OPERATIONS*** on the display, press the **<SEL/CANC>** key until ***LEARNING SECTION*** appears; press the **<ENTER>** key.

2. ***VOICE TRAIN*** now appears. Press the **<SEL/CANC>** key until ***VOICE SETUP*** is on the display; press the **<ENTER>** key.

3. Press the **<SEL/CANC>** key until ***FAST PHONE ANSWR.*** appears; then press the **<ENTER>** key

4. ***IS NOT WORKING*** Press **<SEL/CANC>** now ***IS WORKING*** is now displayed. press the **<ENTER>** key, now ***IS WORKING*** is now displayed. press the **<ENTER>** key.

When these steps have been done the feature will work as follows:

Once the phone has rung one complete ring the word ***RING*** will be displayed. If you call your system by name at this point it will instantly open the phone line.

SECTION 11 - OPERATIONS

Contents

11.1 VOICE CONTROL 70
11.1.1 ALARM 72
11.1.2 RECEIVING/PLACING PHONE CALLS 72
11.1.3 SHORT FORM (OPTIONAL) 73
11.1.4 AUTO CORRECTION 74
11.2 MANUAL CONTROL 74
11.3 PHONE DIALER 76
11.4 R.T.A. (REMOTE TELEPHONE ACCESS) 77

11.1 VOICE CONTROL

Voice Control is the first option in the **Operations** menu. In this mode of operation you can, for instance, turn on or off a radio, brighten or dim a lamp, turn on or off the alarm, place a telephone call, turn everything off at once, and tell the Series II home automation system what to do if it has made a mistake. To enter the Voice Control mode, follow these steps:

1. Press the **<MENU>** key once or twice until you see ***OPERATIONS*** on the display panel; press the **<ENTER>** key.

2. ***VOICE CONTROL*** now appears; press the **<ENTER>** key.

3. When you see the **current time** on the display, you have entered the Voice Control mode and the Series II home automation system is ready to accept your verbal commands. Get your Set Up Form and position yourself comfortably about 8 feet from the unit, for your first operation in the Voice Control mode.

> **NOTE:** In the Voice Control mode, your display panel will blink or pulse slightly. THIS IS A NORMAL PART OF THE VOICE RECOGNITION OPERATION, NOTHING IS WRONG WITH YOUR SYSTEM. Each time the display blinks, it has removed all the sounds it has heard as of that moment. An asterisk (*) will appear from time to time on the right side of the display when the Series II home automation system hears a sound. It's best to give a command right after a pulse, when the (*) is NOT on the display, especially if the environment is extremely noisy. The asterisk means too much noise has entered the system and the Series II home automation system is trying to recognize what it has heard. It's best to give your command when the asterisk is **not** displayed. The asterisk should be displayed for about a second and then disappear.

Any time you want to exit this mode of operation, press the **<MENU>** key; ***OPERATIONS*** will appear on the display. You are at the top of the system's main menu, have exited the Voice Control mode of operation, and may use the **<SEL/CANC>** key to scroll to any other part of the menu system.

EXAMPLE: Let's assume you are having a large party and you think the Series II home automation system might become confused by the unusual noise level. Rather than turning the Series II home automation system off, exit to ***OPERATIONS*** on the menu and your unit will be out of the Voice Control mode. When the party quiets down, you may re-enter the Voice Control mode simply by pressing the **<ENTER>** key 2 times.

In the Voice Control operating mode, 3 steps are required in order for the Series II home automation system to respond to a command: speaking its name, telling it the device you want it to operate, and giving it the appropriate command to operate the device. For our step-by-step example, we shall assume you are User 1, your system's name is "Selection," and you want it to turn on and dim a lamp.

1. In a loud, clear, and natural voice, as if you were calling across the room to a person who is slightly hard of hearing, say **"Selection."** (Because you are User 1, the display will show ***USER 1***.)

2. The Series II home automation system will reply saying, "Hello" or "May I help you?" and ***DEVICE:*** will be displayed.

3. As soon as the Series II home automation system speaks, you have only 1 1/2 seconds to tell it which device you want it to operate. You want it to turn

on and dim a lamp, so say, **"Table lamp"** in the same clear voice. (You have set up the lamp as Device 1; therefore, the display will show ***DEVICE 1***.)

4. The Series II home automation system should respond with words such as "OK" or "Right away," and ***COMMAND:*** will be displayed.

5. As soon as it speaks, you have only 1 1/2 seconds to give it a command. You want the lamp to come on and be dimmed, so say, **"Dim,"** and ***DIM*** will be displayed.

If you followed all of the above steps properly, the lamp which you set up as Device 1 should simultaneously come on and be dimmed to the level of brightness you set up in the Dim Factor part of Section 9.

NOTE: If you wanted the lamp to be turned on, but **not** dimmed, your command would have been **"On"** instead of **"Dim."** If later you want the lamp, which is on at full intensity, to be dimmed, you would repeat Steps 1 through 5 above, giving the command **"Dim"** and the Series II home automation system will dim the lamp. If later still you want the lamp to be at full intensity again, you would repeat Steps 1 through 5 above, give the command **"Brighter"** and the Series II home automation system will turn it on to full intensity.

The commands procedure is not difficult, but it does take some time to become accustomed to it. Keep in mind that you must speak in a normal voice, loudly and clearly, and you must give the Series II home automation system commands within the 1 1/2 second time limit after it responds to you.

NOTE: If you exceed the 1 1/2 second time limit, the Series II home automation system will "go back to sleep," and you must start the procedure over from Step 1. If it does not recognize a command you give it, it will say, "Please repeat." This will give you a chance to repeat that command without having to start over. This will be explained in detail later in this section.

Keeping the above example in mind, we will now proceed with instructions for turning a radio on, instead of a lamp.

1. Repeat Steps 1 and 2 in the preceding example.

2. As soon as the Series II home automation system responds to you, you have only 1 1/2 seconds to give it a command. You want it to operate the radio, so loudly and clearly say, **"Radio."** The Series II home automation system will respond with words such as "OK" or "Right away."

3. Immediately after it responds, say, **"On."** If you performed all the steps properly, the radio should now be on.

NOTE: If you told the Series II home automation system to "Dim" the radio and it recognized your command properly, still nothing would happen because your radio is set to an **appliance** module. Appliance modules do <u>not</u> respond to **"DIM", "BRIGHTER,"** and **"LIGHTS ON"** commands.

If you wish to turn OFF either the radio or the lamp, follow the same procedures as above, using the command **"Off please"** in place of **"On."** If you want to turn both devices OFF at once or **all** devices OFF simultaneously, simply say **"Good night."*** For example, giving the **"Selection/Radio/Good night"** command in order, will turn OFF the radio, plus all other devices set up with lamp or appliance modules as established in Section 9.8. When the **GOOD NIGHT** or **ALL-OFF** command is given, the Series II home automation system will begin turning off all lamps and appliances that you have set up, on all house codes in the Set House Code Section of your unit. Any house codes you have told it to ignore (NO) in the Set House Code Section, will <u>not</u> be turned off. They may be turned off by voice control, by the timers, or by manual control (see Section 9.8). This **ALL-OFF** command could require

up to 30 seconds before the next command may be given. It takes approximately 2 seconds per House Code and there are up to 16 house codes which could receive the **ALL-OFF** or **GOOD NIGHT** command.

*** When using "Good Night" or "Lights On" commands, you MUST select a device that is a MODULE (not ASCII or macro) for the operation to function.**

11.1.1 ALARM

The same basic method for operating a lamp or radio is used to operate the Alarm System. Just substitute the word "**Alarm**" for radio or lamp, and follow the procedure above. After you've given the command "**On**" and the Series II home automation system responds, the letter **A** will appear on the display in the space after the current time. You now have 60 seconds (or whatever time you established in your Set Up Alarm Section) to leave the room so the infrared zone sensor will not detect you and demand your identification. To turn the system off, say "**Selection**"; wait for it to respond; then say "**Alarm,**" wait for a response; then say your **PASSWORD**. If you have forgotten the password you entered into the system, refer to your Set Up Form for the Alarm Vocabulary. For detailed instructions, see Section 12.2.

11.1.2 RECEIVING/PLACING PHONE CALLS

Answering or placing a telephone call is slightly different than turning modules on or off. Remember to speak clearly, and to heed the 1 1/2 second time limit when commanding the Series II home automation system to answer the telephone.

1. Say "**Selection**" and wait for the system's response.

2. Immediately after it responds, say "**Telephone**"; wait for the next response.

3. Immediately after that response, say "**OK,**" and instantly the Series II home automation system will open the phone line. When the line is open (even if the telephone jack is not plugged in), a **T** will appear on the display in the space after the current time. After 1 1/2 seconds, you may start talking to the caller and converse as long as you wish. When the caller hangs up, your system will automatically disconnect the circuit as soon as it hears a dial tone without you giving any command to do so.

NOTE: To end the call before the other party hangs up, repeat Steps 1 through 3 and the Series II home automation system will disconnect the circuit. For instance, you may have been put on "hold" and don't want to continue waiting for the party to answer; give the commands in Steps 1 through 3, and the Series II home automation system will end the call for you. If you are talking to one party, and you have "CALL WAITING," you may switch back and forth from one call to the other call by saying: "SELECTION," "TELEPHONE," "CALL WAITING," each time you wish to switch calls.

To place a telephone call using one of your stored telephone numbers, follow the above procedure, except that instead of saying "**OK,**" you would say the **name of the person** you want to call. For example, if you wish to have the Series II home automation system place a call to your mother, whom you entered as "Mom" and listed as Name 2 in the Telephone Vocabulary section, you would now say, "**Mom.**" If the Series II home automation system has recognized your word correctly, ***NAME 2*** will appear on the display panel. If it does, then say "**OK**"; the system will automatically dial your mother's number. If the Series II home automation system didn't correctly recognize your word and selected another name, simply say "**No**" when you see the incorrect name on the display. It will then respond and allow you to repeat the original name. If it recognition is correct this time, give it the command "**OK.**"

NOTE: TO CHANGE YOUR MIND OR CORRECT AN INCORRECT CHOICE, SEE AUTO CORRECTION (11.1.4) BELOW.

In the Voice Control mode, the words TELEPHONE, ALARM and NO are factory-set and thus, will appear on the display panel as you give the command for each. A lamp, radio or any of the other 32 devices you may set up for Voice Control operation will not automatically appear on the display when you say the word. Instead, when you say "table lamp" or "radio," or, the name of any other established device, the device number (1 through 32) you assigned it when you set it up, will appear on the display. This is because when you bring the Series II home automation system home, it knows what **TELEPHONE, ALARM** and **NO** are. It does not know though that Device #1 is table lamp; it could be the TV or any other appliance. If you would like to see the words, **RADIO, TABLE LAMP, TV**, etc., appear on the display when you ask the Series II home automation system to operate them, refer to Section 12.3. It will explain how to set up the correct text for the Telephone and Device Sections.

NOTE: IF AN **A**, T AND A C APPEAR ON THE DISPLAY IN THE SPACE AFTER THE CURRENT TIME, IT MEANS THAT YOUR ALARM IS ACTIVATED, YOUR TELEPHONE LINE IS OPEN, AND A TIME-OUT "COUNT DOWN" IS IN PROGRESS.

11.1.3 SHORT FORM (OPTIONAL)

The **SHORT FORM** allows the Series II home automation system to respond to and act upon a 2 step sequence instead of the normal 3 step approach, and 1 step instead of 2 in the AUXILIARY section. This "Short Form" feature also has an AUTO REVERSE MEMORY* of each device used by it. If we were to turn on the Table Lamp using the short form, it would work as follows:

1. In a loud, clear, and natural voice, as if you were calling across the room to a person who is slightly hard of hearing, say, **"Selection."** Because you are User 1, the display will show ***USER 1***.

2. The Series II home automation system will reply, saying something like "Hello" or "May I help you?" and ***DEVICE:*** will be displayed.

3. As soon as the Series II home automation system speaks, you have only 1 1/2 seconds to tell it which device you want it to operate. So you immediately say, in a normal-sounding voice, **"Table lamp."** You have set up the lamp and recorded it on your Set Up Form as Device 1; therefore, the display will show ***DEVICE 1***.

4. Now you should hear the Series II home automation system respond with words such as "OK" or "Right away," and ***COMMAND:*** will be displayed.

5. As soon as it speaks, you now have 1 1/2 seconds to give it a command. If you decide not to give an additional command within the 1 1/2 second time limit, and you are in Short Form mode, the Series II home automation system will automatically select and execute the command specified in the Device Set up section (see section 9.4 paragraph 7). If REVERSE is selected, the system will execute the reverse of the last command issued to that device by the Series II home automation system. Remember, this includes commands issued by timer and RTA. The reverse of an ACTIVATE command is an ON command. The results for a TIME-OUT command will depend on the TIME-OUT command having been completed or not.

EXAMPLE: By speaking to the Series II home automation system, **"SELECTION,"** then **"TABLE LAMP,"** the lamp would turn on the first time. The second time you said, **"SELECTION,", "TABLE LAMP,"** the lamp would turn off. If you said, **"SELECTION,", "TABLE LAMP," "DIM,"** the lamp would dim. If you then just said, **"SELECTION," TABLE LAMP,"** the lamp would **auto reverse** and brighten.

* AUTO REVERSING MEMORY: Remembers the last time that device was used and the last X-10 position it was left in; ON, OFF, DIM, ETC.... All devices are assumed to start in the OFF position. If the Device is not setup as a MODULE, or a MACRO, then it will just repeat the same command again.

11.1.4 AUTO CORRECTION

The Series II home automation system, in VOICE CONTROL mode, has the ability when told it has made an incorrect word selection (by you saying "NO" to "Auto Correct") it will automatically drop that invalid word from the vocabulary list and instantly seek and display the **next correct response**.

EXAMPLE: If at any time the Series II home automation system incorrectly recognizes your command and selects a wrong response, you may cancel it simply by saying "No." For instance, you said **"Radio"** and it recognized the word as **"Table lamp"**; when ***DEVICE 1*** appears on the display (because you set up Device 1 as a lamp), say, **"No"** and that will cancel the incorrectly recognized device. The Series II home automation system will then automatically drop that invalid word from the vocabulary list and instantly seek and display the **next correct response**. If the correct selection is displayed, proceed with the correct command as described in voice control above. If the second displayed word is also incorrect, again say, **"No"** and that will cancel the incorrectly recognized word, then repeat your originally desired word.

When you use the word "No" in any of the vocabulary sections of your system (all listed on your Set Up Form), the system automatically puts you back into that vocabulary section with the opportunity to restate the correct word choice again.

NOTE: When selecting the telephone mode, if you say, "No" two consecutive times after any name, your system will automatically erase your last two commands. For example, if after you gave the series of commands, **"Selection/Telephone/Mom,"** you remembered your mother was visiting friends, and you decided to listen to the radio, instead you could say **"No"** twice. You would automatically return to your **device** command point, and now you could say **"Radio,"** then proceed with the **"On"** command.

11.2 MANUAL CONTROL

The Manual Control mode of operation enables you to control your lamps and appliances by push button command. This mode is useful if you wish to operate a lamp or appliance other than the 42 that are controlled by voice command or if you wish to override the Voice Control features of this system. A total of 256 X-10 codes and 96 Series II home automation system devices may be accessed manually. The ALARM may also be turned on using Manual Control. In this mode of operation, the second level of commands on your keyboard will be used. The number keys **1, 2, 3, 4, 6, 7, 8,** and **9** will now take alternate keyboard functions (see Section 6.2).

1. Starting with ***OPERATIONS*** displayed on the panel, press the **<ENTER>** key until ***VOICE CONTROL*** appears.

2. Press the **<SEL/CANC>** key until ***MANUAL CONTROL*** appears on the display.

3. Press the **<ENTER>** key; you will now see ***DEVICE #***.

4. Press the appropriate device number (1 through 96) of the device you want to operate.

EXAMPLE: If you wish to turn the lamp on that is set up as Device 1, you would press the **<1>** key, and then press the **<ENTER>** key. Once you have done this, skip to Step 8 below. If you do not wish to operate one of the 42 devices selected for Voice Control or the 96 selected for Timer Control, but would like to operate one of the other X-10 codes available, follow steps 5 and 6.

5. If no number was selected after ***DEVICE #*** appeared on the display, press the **<ENTER>** key; ***HOUSE*** will appear.

6. Enter the appropriate letter to equal the House Code setting (A through P) in consecutive order. Press the **<ENTER>** key.

7. You will now see ***UNIT*** on the display. Select the appropriate number from 1-16 that corresponds to the Unit Code for the module you wish to activate. In the example above, House Code A-1, you would press the **<1>** key and then the **<ENTER>** key.

8. After you have entered your House and Unit Code setting for the module you wish to activate, ***COMMAND*** will appear on the display. Press the appropriate command key (**BRIGHT, ON, ALL-ON, TIME OUT, DIM, OFF, ALL-OFF, ACTIVATE**) and the Device or House and Unit Codes that you entered will immediately respond.

NOTE: ALL EIGHT OF THESE COMMANDS WORK ON DEVICES SET UP WITH LAMP MODULES. THE **BRIGHT, DIM** AND **ALL-ON** COMMANDS WILL HAVE NO EFFECT ON DEVICES SET UP WITH APPLIANCE MODULES.

a. **BRIGHT** - This command will brighten a lamp that has been dimmed previously, by Voice Control, Manual Control or Timer Control. When the "Bright" key is pressed, the lamp will brighten to its fullest intensity possible.

b. **ON** - This command will turn **ON** any device set up with either a lamp module or an appliance module. If you wish to turn on a radio, for example, you would press the **<ON>** key. This will send the **ON** command to the House and Unit Code device # you have selected.

c. **ALL-ON** - This command will activate all lights set up with lamp modules in your home; it applies to all lights on the House Code you selected, without regard to whatever Unit Code you may have selected or to any device you select. All lights on House Codes set to yes will come on.

d. **TIME OUT** - (the #4 key on the keyboard). This command will activate, or count down a device for a set number of **minutes** as defined in the system setup "SET TIME-OUT." The unit must be in Voice Control mode for the OFF action to occur at the end of the Time-Out interval.

e. **DIM** - This command applies only to lights set up with lamp modules. When you select this command, the Series II home automation system will dim the lamp to your predetermined preference. (Dimming is covered in detail in Section 9.5.)

f. **OFF** - When this command is used, the Series II home automation system will turn **OFF** the lamp or appliance module with the House and Unit Code device # you selected.

g. **ALL-OFF** - This command will simultaneously turn **OFF all lamps and appliances** on the House Code you selected. It's equivalent to the **GOOD NIGHT** voice command given in the Voice Control mode of operation. Device #1 does all house codes set to yes in system (see section 9.8).

h. **ACTIVATE** - (the #9 key on the keyboard). This command will activate a device for a set number of **seconds** as defined in the system setup "ACTIVATE DELAY."

NOTE: The Manual Control mode of operation has a built-in keyboard memory. For example, if you have just activated House Code G, Unit 16 with the command **ON**, and now you wish to activate that same House and Unit Code with an **OFF** command, when the House code is asked for, you would merely press the **<ENTER>** key **twice**. When ***COMMAND:*** appears on the display panel, press the **<OFF>** key.

MANUAL ALARM CONTROL:

The alarm system may be turned on manually by performing the following steps:

1. With ***DEVICE #:*** on the display, press the first Alpha Select key (marked **YES**).

2. Press the letter "**A**" key, then the **<ENTER>** key.

Your system will immediately go into Voice Control and will now function as if activated by voice. (See Section 12.2)

NOTE: THE ALARM MAY NOT BE TURNED OFF IN MANUAL CONTROL. REFER TO SECTION 12.2 FOR MORE INFORMATION.

11.3 PHONE DIALER

In addition to having the ability to place and receive phone calls in the Voice Control mode, the Series II home automation system also has a manual phone dialer. To use this feature, proceed with the following steps:

1. Press the **<MENU>** key until ***OPERATIONS*** appears on the display panel; press the **<ENTER>** key.

2. You will now see ***VOICE CONTROL***. Press the **<SEL/CANC>** key until ***PHONE DIALER*** appears, then press the **<ENTER>** key.

3 You will now see ***#*** on the display. Press the number keys that correspond to the telephone number you want to dial. The only difference between the Series II home automation system and a touch-tone phone is that the number will not be dialed until you press the **<ENTER>** key. The telephone number can contain the digits, **#** and *. Inserting a space or a - causes a pause in dialing to allow waiting for a second dial tone when calling from a business or when entering a pacer number. A space pauses for 6 seconds and a - for 3 seconds. If you would like to reference a number entered in another slot to expand the number of digits available to dial or to avoid entering the same number for each user you can dial the number stored in another slot by entering a **U** followed by a digit from 1 through 4 to select the user number and following this with a 2 digit slot number from 1 through 16. For example to access User 2 slot 3 you would enter **U203** the end of the phone number you are entering. No digits following the U command will be dialed. If you accidentally press a wrong number key, simply press the **<SEL/CANC>** key, and then press the correct number key. When the correct telephone number appears on the display panel, press the **<ENTER>** key and the Series II home automation system will dial the number for you. At this time, you may close the keyboard

door and wait for the person you called to answer. At the end of your conversation, the Series II home automation system will automatically hang up when it hears a dial-tone.

NOTE: If you want to exit this Manual Control phone dial section and enter the Voice Control mode, press the **<MENU>** key. Then press the **<ENTER>** key so that the current time of day is displayed. You are now in Voice Control operation and your telephone system will operate as usual. Pressing the **<MENU>** key a second time will hang up the phone and disconnect the call.

11.4 R.T.A. (REMOTE TELEPHONE ACCESS)

The Series II home automation system has the ability to be controlled by any touch-tone phone (from inside or outside your home). Using R.T.A., you can control all of the 96 devices, turn its alarm system on and off, open the speaker phone to "listen" in on the house, as well as operate all 256 X-10 codes (A-1...P-16). This is done by using the keypad from any touch-tone phone from anywhere in the world.

TO USE R.T.A AWAY FROM HOME: You must first enter your 4-digit security access code followed by the # key. You will then hear 1 beep. Select from the options below and when finished, press 000#. You will get three beeps and the phone line will disconnect.

NOTE: WHEN ENTERING DEVICES NUMBERED 1-9 OR HOUSE CODES A-I, YOU MUST ENTER TWO DIGIT CODES (01-09) OR YOU WILL GET IMPROPER RESULTS. If a mistake is made when entering commands, press 0,0,0,0,0, plus, the # to clear and start over.

DEVICE LIBRARY CONTROL:

1) Pick up the handset on the phone and listen for the dial-tone.
2) Press the 2-digits equal to the DEVICE CODE 1-64.
3) Press the key equal to the command code as on the Series II home automation system keyboard: 1=BRIGHT, 2=ON, 3=ALL ON, 4=TIME OUT, 6=DIM, 7=OFF, 8=ALL OFF, 9=ACTIVATE . Press the # key to enter your selection.
4) **An acknowledge tone* will be heard.** To enter another device, repeat steps 1 through 4 above, or 000# to end.

* **Your unit has MRTA, so you will hear a tone rising in pitch.**

NOTE: ALARM IS DEVICE 98 AND TELEPHONE "LISTEN IN" IS DEVICE 97. Using these, you can turn the alarm on/off or listen in on the house.

EXAMPLE: 156# = Device 15 dimmed. Press 15 = (Device #15). Press 6 = (command code for dim). Press # = (for enter).

NOTE: IN ALL MODES OF CONTROL, IF ONLY A DEVICE IS SELECTED AND THE # IS PRESSED, THE DEVICE WILL ACT AS IF YOU HAVE SELECTED THE ACTIVATE (ON/OFF) DELAY COMMAND.

X-10 CONTROL:

1) Pick up the handset on the phone keypad, press the No.3.
2) Press the 2-digits equal to the HOUSE CODE (A - P = 01-16).
3) Press the 2-digits equal to the UNIT CODE (01 - 16).
4) Press the KEY equal to the command code as on the Series II home automation system keyboard: 1=BRIGHT, 2=ON, 3=ALL ON, 6=DIM, 7=OFF, 8=ALL OFF. Press the # key.

5) **An acknowledge tone will be heard.** To enter another code, repeat steps 1 through 4 above, or 000# to end.

EXAMPLE: 304092# = X-10 house code D, unit code 9, command on.

TO USE R.T.A FROM INSIDE THE HOME:

Unless a ring signal was received during the last 5 minutes, NO SECURITY CODE IS NEEDED. However, you should hang up the phone after each command sequence to avoid phone company interference.

Default Settings:

1) Number of rings before answer = 8, Range (01-99)
2) Security Access Code = 1397, Range (0000-9999)
3) Baud Rate = 4800, Range (300, 1200, 4800)

Change Default settings:

1) Pick up the handset and press 999#.
2) Press the default from above (1,2,3) that you wish to change.
3) Press in the new number, then the # key. You will hear one beep on the line to confirm the new setting.

EXAMPLE: Change security access code from 1379 to 1234:
Pick up the handset, press 999#, 1234, plus #. You will get one beep on the line to confirm change.

NOTE: AFTER A POWER FAILURE, OR PRESSING THE SYSTEM RESET BUTTON, SETTINGS WILL RETURN TO THE DEFAULT.

RTA DISABLE COMMAND:

Entering *# will disable RTA until another *# command is entered. The system will respond with a long beep when you disable RTA, and with two beeps when you re-engage it. The password is never required before entering an RTA, disable command.

CHECK FOR PASSWORD WHEN RING SIGNAL IS DETECTED:
For a period of five minutes after the detection of a ring signal the password must be entered before entering RTA commands. If you fail to enter the password, you will hear a long beep.

DEFAULT PASSWORD:
If the password is set to 0000, no password entry will be required.

ALARM OFF COMMAND:
Require password entry if password is set to other than 0000. Enter 98, followed by your 4-digit password, followed by # to turn off the alarm. Enter 987# or 980000# if password is set to 0000. Alarm on command is still 982#.

*** FOR R.T.A. TO FUNCTION, THE UNIT MUST BE LEFT IN VOICE CONTROL MODE** (time is displayed).

SECTION 12 - SPECIAL OPTIONS

Contents

12.1 SETTING UP TIMERS 82
12.2 SETTING UP MACROS (OPTIONAL) 87
12.3 SETTING UP HOLIDAY SCHEDULE 88
12.4 SETTING UP ALARM 88
12.5 SETTING UP ALPHA DISPLAYS 91
12.6 VOICE RESPONSES 92
12.7 RESPONSE-TYPE 93
12.8 CHECK A WORD 93
12.9 RECEIVE COMPUTER COMMANDS 94
12.10 RS-232 REMOTE UPLOAD/DOWNLOAD INITIATION 95
12.11 MRTA MODEM (OPTIONAL) 95
12.11 X-10 RECEIVE 96
12.12 ENERGY EYE 96
12.13 RING DEVICE 97

12.1 SETTING UP TIMERS

This section will explain the step-by-step procedure for using the system's **SMART CLOCK** feature.

This unique **SMART CLOCK** contains 99 timers that enable you to control **any of the 96 devices on the Device Set Up Form.** All timers have the ability to be your morning wake-up timer. When this timer is activated, the system will say **"Good morning,"** in addition to activating whatever device(s) you have selected. It will continue this at intervals of about every 20 seconds until you give it the series of commands, **"Selection"/ Alarm/ Off please** waiting between each command for its response. Please note that in this instance, "Alarm" refers to "Wake up Alarm," **not** the Series II home automation system "alarm system." **These timers will not only activate the device, but respond verbally as well.** This verbal response capability may be used alone and not activate any device at all, such as to remind you to take your medication, or take out the trash.

Each timer has its own individual **Start Date, Stop Date, On-Time, Off-Time** and days (**Sunday** through **Saturday**) to function. Even special days, holidays, and sunrise and sunset may be tracked.

EXAMPLE: We will set up Timer **#**12. The **Start Date** (the **first** date the timer is activated) will be April 10th; the **Stop Date** (the **last** date the timer will be activated) will be July 31st, and between those dates we will have the radio (Device **#**2 on your Set Up Form), turn **ON** at 7:00 AM and turn **OFF** at 8:30 AM **Monday through Friday only**, not Saturday or Sunday.

NOTE: When a timer is given a **Start Date**, it will become active at 12:01 **AM** on that date, and it will remain functional until 12:00 midnight on the **Stop Date.** Using our example time period ending July 31st, the timer would be active until midnight July 31st.

As you can tell by now, this is probably the most sophisticated timer mechanism you have ever dealt with. Because of **SMART CLOCK**'s flexibility, many combinations are possible. For example, you can have timers with **ON** times greater than **OFF** times, or with **OFF** times nonexistent. **ON** times and **Stop Dates** can be completely nonexistent. These timers can be used in combination to achieve various effects, such as random timing for lighting systems to make your home look "lived-in" when you're not there. They can intermittently interrupt each other for some temporary purpose. For example, if you're going away for a few days and don't want to reset the main heating timer, you may use another timer to override it on a temporary basis. We advise some experimentation with these timers because their energy management potential alone could save you hundreds of dollars a year!

Use the following steps to set up our example and all other timers you wish to activate:

1. Begin by pressing the **<MENU>** key until ***OPERATIONS*** appears on the display; then press the **<SEL/CANC>** key until you see ***TIME FUNCTIONS***. Press the **<ENTER>** key.

2. ***SET UP TIMERS*** now appears; press the **<ENTER>** key.

3. You will now see ***TIMER #?***. The system is asking which timer number (1 through 99) you wish to use. For our example, use Timer **#**12; press the <1> and <2> keys, then the **<ENTER>** key.

4. ***EMPTY*** on the display tells you that this timer is not currently in use. To activate it, press the **<SEL/CANC>** key. You will now see ***NORMAL***; this means this timer (if selected) will function normally. If you press **<SEL/CANC>** again, ***INTERVAL*** appears which indicates that if this is selected, this timer will become a repetitive timer to perform a function continually at

predetermined intervals. If you press **<SEL/CANC>** again, you will see ***SPECIAL*** which means this timer can be used for "SPECIAL" timed events, like the first Monday of the month or every other Tuesday or even something like the 15th of every month. Choose the type of timer you desire and press the **<ENTER>** key. This timer is now active.

5. If "NORMAL" was selected, your display will read ***TURN ON***. This gives you the option to have your appliance or lamp turned **ON** by the timer. Our example calls for a radio to be turned on by Timer #12, so press the **<ENTER>** key.

   If "INTERVAL" was selected then ***ON AT INTERVAL*** is displayed. If you want a device to be continually turned on at preset intervals, then press the <ENTER> key. If you want the device to be continually turned off at the interval then press the **<SEL/CANC>** key and ***OFF AT INTERVAL*** will be displayed. Press the **<ENTER>** key.

   If "SPECIAL" was selected, questions will be the same as a normal timer until noted at the correct step below.

NOTE: At this point, if you had chosen a lamp to be activated, you could have chosen to have it **DIM** or **BRIGHTEN**. **ACTIVATE** and **ALL ON/OFF** may also be selected, **ENERGY EYE**, **RING DEVICE**, or **ALARM** may also be selected. With ***TURN ON*** on the display, press the **<SEL/CANC>** key, ***DIM (LAMP ONLY)*** will display. To have your lamp turn **ON** and **DIM**, you would press the **<ENTER>** key. If **DIM** or **BRIGHT** was selected, then ***STEPS*** would appear on the display.

6. You will see ***START MONTH?***. The system is requesting the month (1 through 12) you want this timer to **start** functioning. April is the 4th month of the calendar year, so press the **<4>** key, then the **<ENTER>** key.

NOTE: IF NO **START** DATE IS SELECTED AND ONLY THE **ENTER** KEY IS PRESSED, THE CURRENT SYSTEM DATE (TODAY'S DATE) WILL AUTOMATICALLY BECOME THE START MONTH, DAY AND YEAR.

7. ***START DATE?*** now appears on the display panel. This is the day of the month you wish the timer to **start** functioning. For our example (April 10) you would press **<1>** and **<0>**, then press the **<ENTER>** key.

8. ***START YEAR?*** is now displayed. Enter the last two digits of the year you want the timer to start (example: 1994 would be "94"). Press the **<ENTER>** key.

9. Now the display shows ***STOP MONTH?*** or the month when you want the timer to **stop** working. For July 31st to be the last day the timer will perform as you selected, July 31st would be the **Stop Date**. July is the 7th month of the calendar year, so press the **<7>** key, then the **<ENTER>** key.

NOTE: IF NO **STOP** DATE IS SELECTED AND ONLY THE **ENTER** KEY IS PRESSED, THE TIMER WILL NOT STOP AFTER IT HAS STARTED.

10. The display now shows ***STOP DATE?***, the **day** of the month you wish the timer to **stop** functioning. August 1st is the stop date for our example; so press the **<1>** key, then press the **<ENTER>** key.

11. ***STOP YEAR*** is now displayed. Enter the last two digits of the year you want the timer to stop (example: 1994 would be "94"). Press the **<ENTER>** key.

At this point, we have established that Timer #12 will **start** on April 10th, 1994 and **stop** on July 31st, 1994.

12. The display shows ***ON HOUR?***. The system is requesting the **hour** of the day you want the timer to **start**. For 7:00 AM, press the **<7>** key and then the **<ENTER>** key.

13. Now you see ***7 AM?***. You want the morning (AM) hour, so press the **<ENTER>** key.

    When ***7 AM?*** appears on the display, you could opt. for 7:00 PM. You would press the **<SEL/CANC>** key and ***7 PM?*** would appear; you would press the **<ENTER>** key to have your unit accept the PM selection. Each time you press the **<SEL/CANC>** key, the system will switch back and forth between 7:00 AM and 7:00 PM to enable you to choose the AM or PM settings for the timers. **All timers work this way.**

14. The display shows ***ON MINUTES?*** or, the **minutes** of the day you want the radio to turn **ON**. Our example is 7:00 AM exactly, so there are no minutes. Press the **<ENTER>** key.

15. ***NO TRACKING*** is displayed. If you do not want the on time of this timer to track either sunrise or sunset, then press the **<ENTER>** key. If you do, you may now select by pressing the **<SEL/CANC>** key. ***TRACK SUNRISE*** will be displayed or by pressing the **<SEL/CANC>** key again you will see ***TRACK SUNSET***. Make your selection and press the **<ENTER>** key.

NOTE: IF TRACK SUNRISE OR TRACK SUNSET IS SELECTED THE TIME YOU ENTER WILL BE ADJUSTED BY THE DIFFERENCE IN SUNRISE OR SUNSET TIME AT MIDNIGHT. ONLY LATITUDES BETWEEN 65° NORTH AND 60° SOUTH WILL BE ACCEPTED. (SEE SECTION **##.#**) TIME WILL BE ACCURATE TO WITHIN 15 MINUTES OF ACTUAL DIFFERENCES IN SUNRISE OR SUNSET TIME OVER THE COURSE OF THE YEAR, WITH BETTER ACCURACIES AS YOU APPROACH 40° LATITUDE.

16. ***NOT RANDOM*** appears, if you want the **ON** time to be exact, press the **<ENTER>** key, if you want the time to be random, plus or minus ten minutes for security purposes, press the **<SEL/CANC>** key and ***RANDOM TIME*** appears. Press the **<ENTER>** key.

NOTE: WHEN RANDOM TIME IS SELECTED FOR EITHER THE ON OR OFF TIME IN A TIMER, NOT SELECTED FOR THE OTHER AND BOTH ON AND OFF TIMES ARE USED, THAN THE DIFFERENCE BETWEEN THE ON AND OFF TIME MUST BE AT LEASE 16 MINUTES. FAILURE TO DO THIS COULD CAUSE THE TIMER TO FUNCTION IMPROPERLY.

17. ***IF DEVICE ?*** is displayed next. If you want this timer to be conditional (to operate or not operate) based upon the status of a device (Example: at 6:00 AM the timer is set to turn on the coffee pot, but because the alarm is on, it will know your gone and skip that function) enter the number of the device the timer is to check. Once the desired device is entered and the **<ENTER>** key is pressed, it will ask if the timer is to be skipped if the device is on. If you would rather the timer is skipped if the device is off, then press the **<SEL/CANC>** key then press the **<ENTER>** key. If no device is required, then press the **<ENTER>** key.

18. Your display panel shows ***OFF HOUR?*** or, what **hour** of the day do you want your timer to turn **OFF** the device it's turning on? For our 8:30 AM example, the hour would be 8. Press the **<8>** key and then press the **<ENTER>** key.

19. The display now shows ***8 AM?***. (As explained above, you may switch between AM and PM by pressing the **<SEL/CANC>** key.) Our example is 8:30 **AM**, so press the **<ENTER>** key.

20. ***OFF MINUTES?*** now appears on the display. This refers to the **minutes** of the day you wish the timer to **deactivate**. For 8:30 AM, press the **<3>** and **<0>** keys, then the **<ENTER>** key.

21. ***NO TRACKING*** is displayed. If you do not want the off time of this timer to track either sunrise or sunset than press the **<ENTER>** key. If you do, you my now select by pressing the <SEL/CANC> key either ***TRACK SUNRISE*** or by pressing the key again you will see ***TRACK SUNSET*** Make your selection and press the **<ENTER>** key.

22. ***NOT RANDOM*** appears. Follow steps 13 and 14 above. If this timer was selected as an interval timer, at this point ***INT HOURS*** will be displayed. If you want this timer to function every so many hours, then enter the frequency in hours you wish, and press the **<ENTER>** key. If you also want minutes, enter them here, then press the **<ENTER>** key. The minimum interval is 1 minute. The maximum is 23 hours and 59 minutes.

NOTE: IF "SPECIAL" TIMER WAS SELECTED, PROCEED WITH STEP 23. IF IT WAS NOT SELECTED THAN SKIP STEPS 23 AND 24 AND GO TO STEP 25.

23. If "SPECIAL" timer was selected, you will now see on the display ***ALL WEEKS***. This means do you want this timer to work every week of the month (example, EVERY TUESDAY). If not, press the **<SEL/CANC>** key and ***FIRST WEEK*** appears. This means the time works only on the first week of the month (example the first TUESDAY of the month). If this is what you want, press the **<ENTER>** key, if not, press the **<SEL/CANC>** key. Each time the **<SEL/CANC>** is pressed ***SECOND WEEK***, ***THIRD WEEK***, ***FOURTH WEEK***, ***LAST WEEK***, or ***REOCCURRING DATE*** (example of REOCCURRING DATE is the 15th of every month) will be displayed. When the correct choice is displayed, press the **<ENTER>** key.

24. ***DO NOT ALTERNATE*** appears. If you wish the timer to function every month or week, press the **<ENTER>** key. If you want to alternate, for example: every other Tuesday, then press **<SEL/CANC>** and ***ALT. BEGIN NOW*** displays. If you want the alternating week or month to start the next time the other conditions are satisfied, press the **<ENTER>** key, if not press **<SEL/CANC>** and ***ALT. NEXT TIME*** is displayed. If this choice is selected, the timer will execute the second time the other conditions are satisfied. If this is what you want, press the **<ENTER>** key.

NOTE: SINCE THERE IS NO WAY FOR THE SERIES II HOME AUTOMATION SYSTEM TO KNOW WHAT YOUR INTENTIONS ARE, IT WILL ASK YOU IF THE TIMER IS TO START NOW (WHEN YOU LOAD FROM A RAM PACK) IF THE ALTERNATE OPTION IS CHOSEN FOR A TIMER.

25. Now ***DEVICE #?*** is displayed. On your Set Up Form you have 96 devices from which to choose. For our example, we are using Device **#2**, which we have established on the form as **radio**. Press the **<2>** key, then press the **<ENTER>** key.

By making these choices you have told the timer, so far, that **Device #2 (radio)** is to **start April 10, 1994, stop August 1, 1994, turn ON at 7:00 AM,** and **turn OFF at 8:30 AM** Now we will select the **days** of the week you want all of this to happen.

26. The display shows ***SUNDAY NO?***. The system is asking if you want this timer to function on Sunday. By pressing the **<SEL/CANC>** key, you may switch back and forth between ***SUNDAY NO?*** and ***SUNDAY YES?***. Our example is for Monday through Friday **only** (**not** Saturday or Sunday). To skip Sunday, press the **<ENTER>** key when ***SUNDAY NO?*** is displayed.

27. Next comes ***MONDAY NO?***. Since Monday is a day we want the timer to operate, press the **<SEL/CANC>** key and ***MONDAY YES?*** will appear. Then press the **<ENTER>** key. This same procedure applies to Tuesday, Wednesday, Thursday and Friday. In each case, press the **<SEL/CANC>** key to display the day with a **YES** setting, then press the **<ENTER>** key.

28. When the display shows ***SATURDAY NO?***, since Saturday is **not** one of the days we want this timer to turn on, press the **<ENTER>** key.

29. ***IGNORE HOL SCHED*** appears. By making the correct selection, you can have a timer function **only** on holidays, **not** on holidays, or Ignore holidays. Using the **<SEL/CANC>** key, make your desired selection and press the **<ENTER>** key.

30. ***SILENT*** appears. This means the timer is NOT a wake-up timer. If you wish the timer to be a wake-up timer, press the **<SEL/CANC>** key and ***AUDIBLE*** will be displayed. Press the **<ENTER>** key.

With the above step, you have completed setting up Timer #12 with all the proper settings according to our example. **All of the remaining timers (1 through 99) can be set up the same way.**

NOTE: ENTRIES STORED IN TIMER 99 WILL EXECUTE ONLY ONCE. THEREAFTER, TIMER 99 WILL ERASE ITSELF. TIMER 99 OVERRIDES TIMER 98. TIMER 98 HAS NOT BEEN ERASED, BUT ONLY TEMPORARILY DISREGARDED.

Once set up, each of the timers may be reviewed **without disturbing any of the settings you have established.** You may, however, change any setting you wish during the review process. To demonstrate this, we will now review Timer #12:

1. The display panel shows ***TIMER NO.?***. Press the **<1>** key and the **<2>** key, then the **<ENTER>** key; ***IN USE*** will appear.

2. Press the **<ENTER>** key again and you will see ***TURN ON***. This means the timer is to turn **ON** a lamp or appliance.

3. Each time the **<ENTER>** key is pressed, the display will show the selection you made for each of the choices available for the timer you are reviewing. To change the information that is displayed, press the **<SEL/CANC>** key.

EXAMPLE: If you want to change the **ON** hour from 7:00 **AM** to 8:00 **PM**, press the **<ENTER>** key until ***ON HOUR*** appears on the display. Press the **<SEL/CANC>** key to cancel your original entry, then enter your new choice following the steps above. In this way, you may change an **ON** or **OFF** time, an **ON** day or **OFF** day, etc., by going to the pertinent portion of the timer section and changing it. **All timers are set up the same way.**

NOTE: IF THE STOP DATE AND YEAR OF A TIMER HAVE PASSED, THE TIMER WILL BEGIN EXECUTION IF THE START DATE IS CORRECT WITH THE CURRENT YEAR SUBSTITUTED FOR THE YEAR THAT WAS ENTERED. THE TIMER WILL STOP ON THE STOP DATE WITH THE CURRENT YEAR SUBSTITUTED. THIS IS TO ALLOW FOR SEASONAL TIMERS WITHOUT HAVING TO ADJUST THE YEAR. TIMERS MAY BE EXECUTED TWICE OR SKIPPED WHEN DAYLIGHT SAVINGS TIME CORRECTIONS ARE MADE (IF ENGAGED).

12.2 SETTING UP MACROS (OPTIONAL)

This is one of the exciting and most powerful features of the Series II home automation system. With macros, you can set in motion many operations with just one command. There are 32 macros and each macro can access as many as 16 of the total 96 devices in the system's device library. For example, let's say you are going to have a party, with one command, "PARTY TIME"/"ON" you could do the following sequence of events:

EXAMPLE:

(ACTION)	(DEVICE #)	(ACTION)	(DEVICE #)
1. Turn off the TV set	(4)	2. Turn on the Stereo	(37)
3. Turn on the Hot Tub	(56)	4. Dim the Room Light	(22)

When the party is over, one command, "PARTY TIME"/"OFF PLEASE" puts everything back the way it was. Using just one macro, you can operate up to 16 devices at once, and devices can even be other macros*. Set up macros as follows:

1. Starting with ***OPERATIONS*** on the display panel, press the **<SEL/CANC>** key until ***SPECIAL OPTIONS*** is displayed. Press the **<ENTER>** key.

2. ***SET UP DEVICES*** appears. Press the **<SEL/CANC>** key until you see ***SET UP MACROS***, then press the **<ENTER>** key.

3. You will now see ***MACRO #:***. Select the macro number you wish to install. Our example is macro #1; press the **<1>** key, then the **<ENTER>** key.

4. You will see ***1-1 EMPTY***; this means you are in macro 1, option 1, and it's currently empty. To change the status of option one, press the **<SEL/CANC>** key. ***1-1 DEV:** * will appear, prompting you to enter one of the devices (1-96) from the system's device library. In our example, "PARTY TIME"/"TV" is device 4, so you would press the **<4>** key and then the **<ENTER>** key.

5. ***1-1 DEV:4 DIM*** is shown on the display. Since the correct command for the TV is off, press the **<SEC/CANC>** key until ***1-1 DEV:4 OFF*** is shown, then press the **<ENTER>** key.

6. You will now see ***1-2 EMPTY*** on the display. Repeat steps 4 and 5 above until all desired devices and commands have been selected for that macro. After the last selection, press the **<ENTER>** key. Now the word ***MACRO #:*** is displayed and you may select another macro.

***NOTE: WHEN USING A DEVICE AS A MACRO, IT MAY BE "NESTED" NO MORE THAN THREE DEEP: A MACRO STARTS ANOTHER MACRO, STARTS ANOTHER MACRO.**

12.3 SETTING UP HOLIDAY SCHEDULE

The Series II has the ability to track up to 24 individual holidays. Each of these may either be specific dates (example: July 4th), or they may be date ranges (example: December 24 to January 2). These "tracked" holiday schedules will be used by the timers in the Series II in one of three ways:

1. **Ignore** holiday schedules all together.
2. **Allow** the timer to operate only on holidays.
3. **Prevent** the timer from operating on holidays.

To setup the schedules proceed, with the following steps:

1. Begin by pressing the **<MENU>** key until ***OPERATIONS*** appears on the display; then press the **<SEL/CANC>** key until you see ***TIME FUNCTIONS*.** Press the **<ENTER>** key.
2. ***SET UP TIMERS*** now appears; press **<SEL/CANC>** until ***SET HOL SCHEDULE*** appears, then press the **<ENTER>** key.
3. ***SCHEDULE # ?*** appears; press the number of the holiday schedule you wish to establish (example: (any number from 1-24), then press the **<ENTER>** key.
4. ***FROM MONTH ?*** is now displayed. Enter the month (1-12) in which the holiday occurs, then press the **<ENTER>** key.
5. ***DATE ?*** now appears; enter the date (1-31) of the holiday and press the **<ENTER>** key.
6. ***TO MONTH ?*** is displayed. If the holiday is a specific date (example: July 4th) and there is no range, then just press the **<ENTER>** key. If there is a holiday range, then enter the stop month, press the **<ENTER>** key and ***DATE ?*** displays, enter the ending date and then press the **<ENTER>** key.
7. ***SCHEDULE # ?*** appears; you may now select the next holiday schedule you wish to establish.

12.4 SETTING UP ALARM

This section will explain in detail the procedure for setting up the system's Intrusion Detection System for your home.

1. Begin by pressing the **<MENU>** key until ***OPERATIONS*** is displayed on the panel, then press the **<SEL/CANC>** key until you see ***SPECIAL OPTIONS*;** press the **<ENTER>** key.
2. Press the **<SEL/CANC>** key until ***SET UP ALARM*** appears, then press the **<ENTER>** key.

3. You will now see ***SILENT ALARM NO***. The Series II home automation system is asking whether or not you want this to be a **silent** alarm. For purposes of our example, it will not be a silent alarm, so press the **<ENTER>** key.

NOTE: IF YOU WANTED THIS TO BE A SILENT ALARM, YOU WOULD PRESS THE **<SEL/CANC>** KEY UNTIL ***SILENT ALARM YES*** APPEARED. THEN YOU WOULD PRESS THE **<ENTER>** KEY.

4. You will now see ***ALL LIGHTS PULSE***. By DEFAULT setting, when the alarm is activated, all lights in the system will come on and **blink on and off** (pulse) as an alert to you or the neighbors, and the police that something is wrong in your home. If you want this to happen, press the **<ENTER>** key. If you don't want that effect, press the **<SEL/CANC>** key until ***ALL LIGHTS ON*** is displayed. This means all lights in your home would **come on and stay on** without blinking; if this is your choice, press the **<ENTER>** key. Your third option is **not to have any lights come on or change from their current position** when the alarm system is activated. If this is your choice, press the **<SEL/CANC>** key until ***ALL LIGHTS NONE*** appears; then press the **<ENTER>** key. See note on step 6.

5. Next, you will see ***1. DEVICE PULSE***. This means that the first Alarm Device has been DEFAULT set to pulse when it's activated. If this is the action you desire, press the **<ENTER>** key. If you chose a bell to be set up as your first device to be activated in the alarm mode, the pulsing effect would not apply. You would press the **<SEL/CANC>** key until ***1. DEVICE ON*** appears, to have the bell turn **ON** and stay on when the alarm system is activated. Your third option is to not **activate any device.** Press the **<SEL/CANC>** key until ***1. DEVICE NONE*** appears, then press the **<ENTER>** key.

6. ***1.DEVICE #1*** appears. The system is telling you that Device #1 on your Set Up Form will be activated as Alarm Device #1 and it's DEFAULT set to pulse. However, you may choose any one of the 96 devices on your Set Up Form. For our example, we will choose Device #7 as Alarm Device #1. Press the **<SEL/CANC>** key, then the **<7>** key, then the **<ENTER>** key. **Alarm Device #2 and Alarm Device #3 are activated the same way.** If you don't want to set up Alarm Device #1, press the **<SEL/CANC>** key until ***1.DEVICE NONE*** appears, then press the **<ENTER>** key. If you want to skip Alarm Device #2 or Alarm Device #3, follow that same procedure as each Device # is displayed.

NOTE: DO NOT USE MACRO TYPE DEVICES HERE, AS COMMANDS ARE SENT CONTINUOUSLY TO PREVENT A BURGLAR FROM CONTROLLING YOUR LIGHTS.

7. ***DURATION*** will appear. The DEFAULT duration for your alarm system to be activated is 0 minutes. An activated alarm system will blink or pulse lights, ring bells, or whatever you set up in your Alarm Devices above, for any specified duration between 1 and 255 minutes. It will then shut off and reset, waiting for the next intrusion. In this case, instead of the DEFAULT, let's use 7 minutes: press the **<7>** key, then press the **<ENTER>** key.

NOTE: IN MOST RESIDENTIAL COMMUNITIES, LOCAL GOVERNMENTS SET A MAXIMUM OF 10 MINUTES FOR AN ALARM SYSTEM TO BE ACTIVATED. WE SUGGEST YOU CHECK WITH YOUR LOCAL AUTHORITIES TO DETERMINE THE TIME LIMIT.

8. You will now see ***DELAY TIME 60***. Your unit has been DEFAULT set at approximately a 60 second delay between turning **ON** the system's Intrusion Detection System and your departure, and between your re-entry and the alarm system's activation. **This delay time is approximately the same for both entry and exit.** If this is sufficient time, press the **<ENTER>** key. You may choose from 1 to 99 seconds as the **approximate delay time.** We recommend at least

15 to 20 seconds, so you may activate the system properly in the event of an improper password system's non-recognition of the password. In this example, we will use a delay of 30 seconds. Press the **<SEL/CANC>** key, then the **<3>** key, then the **<0>** key; press the **<ENTER>** key.

NOTE: IF THE ROOM IS NOISY, THE ACTIVATION TIME COULD BE LONGER THAN IT'S SET DURATION. IF AN ASTERISK (*) APPEARS ON THE DISPLAY, BESIDE THE TIME, THE SERIES II HOME AUTOMATION SYSTEM IS HEARING SOUNDS THAT WILL SLOW DOWN THE ACTIVATION PROCESS.

9. ***SAFETY LIGHT NO*** now appears on the display. The Series II home automation system is asking if, upon your entry, it should turn on a safety light so you may see before the alarm system is deactivated. If you do not want a light turned on, press the **<ENTER>** key. If you do want a safety light, press the **<SEL/CANC>** key until ***SAFETY LIGHT YES*** appears on the display; then press the **<ENTER>** key.

10. Now you will see ***DEVICE #.?***. The Series II home automation system is asking which device you wish to activate as a safety light. Besides from a light, a video camera or other device may also be activated at this time. This is an "instant-on" situation and may be used for many purposes other than turning on a safety light. Remember, this does **NOT** activate the Intrusion Detection System, but rather **reminds** you that the system has been activated and the device will NOT go off after the delay time has been reached. In this case, we will select Device #1, lamp. Press the **<1>** key, then press the **<ENTER>** key.

11. ***ALARM UNIT *** now appears on the display. The Series II home automation system is asking if, upon turning on your alarm, it should also turn on another device, like a master alarm interface for the master alarm system to activate. If you do not want an additional device turned on, press the **<ENTER>** key. If you do want one, press the **<SEL/CANC>** key. The Series II home automation system is asking which device you wish to activate at the same time as the system's internal alarm. Aside from an alarm interface, a lamp, or video camera, another device may also be activated at this time, even a computer code to act as an alarm time log. This is an "also-on" situation, and may be used for many purposes other than turning on an alarm panel. In this case, we will select Device #1, lamp. Press the **<1>** key, then the **<ENTER>** key. Your Intrusion Detection System is now set up and ready for use in the Voice Control mode of operation.

Once in the Voice Control mode of operation, turning your Intrusion Detection System **ON** or **OFF** is a three-step command/response procedure. Full details are covered in Section 11.1.1, but in brief, the procedure is as follows:

ON - (1) Say the system's **name.**
(2) After it responds, say **"Alarm."**
(3) After it responds, say **"On."** Your alarm system is now **ON**, and you have in this case, 30 seconds to leave the house before it will arm.

OFF - When you re-enter your home, you will have 30 seconds after the system detects you, to correctly complete the command/response series before your system goes into the alarm mode.
(1) Say the system's **name.**
(2) After it responds, say **"Alarm."**
(3) After it responds, say your **PASSWORD.**

NOTE: ONCE THE ALARM SYSTEM HAS BEEN TURNED ON, THE KEYBOARD WILL NO LONGER OPERATE UNTIL YOU HAVE TURNED THE ALARM OFF OR FOLLOWED THE RESET PROCEDURE EXPLAINED BELOW.

RESET PROCEDURE: Once the Intrusion Detection System goes into the alarm mode, you are **NO LONGER IN THE VOICE CONTROL MODE OF OPERATION.** To **deactivate** the alarm after it has gone into the alarm mode or turn it off manually after it was turned on, remove the battery backup cover from the back of your unit. Using the eraser end of a pencil, press the RED **RESET** button in the battery compartment. After you've pressed the reset button, the words ***ENTER P.I.N.:*** will appear on the display. Before the alarm system will deactivate and reset itself, you must enter your P.I.N. (Product Identification Number) as described in Section 7.1. The alarm system will stop and reset itself **ONLY** after your P.I.N. has been entered. If the unit is unplugged from the wall at this point, the last commands that were sent will continue. In other words, bells will continue to ring, lights will stay on, and anything else that has been set into motion will continue until the Series II has been manually reset.

NOTE: IF THE LIGHTS OR BELLS WERE IN THE PULSE MODE AND THE UNIT WAS UNPLUGGED FROM THE WALL, THE PULSING WOULD STOP AND LIGHTS WOULD REMAIN IN THE ON POSITION. LIGHTS THAT WERE ON BEFORE ALARM MODE WILL BE SHUT **OFF** USING THE ALL-OFF COMMAND, AS SET UP IN SECTION 9.8.

12.5 SETTING UP ALPHA DISPLAYS

As explained in Section 11.1, when you are in the Voice Control mode and tell the Series II home automation system to operate a device, such as a lamp, TV or telephone, only in the case of **TELEPHONE**, **ALARM**, and **NO** will these words automatically appear on the display panel. All other devices will appear on the display as the Device #. You have to set up each device because your system **does not** automatically know what device you set up with which device number. You can enter appropriate words for all your devices so that these words, instead of device numbers, will be displayed when you give a verbal command. We will now explain the procedure for changing the words that will appear on the display in the Telephone and Device Sections. In our example, we will change "Device 1" to "Lamp" so that when you say "**Lamp**," you will see ***LAMP*** on the display.

1. Following the instructions in Section 9.4, press the appropriate keys until ***IS: DEVICE 1*** appears on the display. This means that Device 1 will be displayed when you are in the Voice Control mode.

2. Press the **<SEL/CANC>** key until ***IS:*** * appears. Your system is now ready to accept letters and numbers. To spell the word LAMP, we will be using the Alpha Select keys in the top right-hand corner of the keyboard (see Figure 6-2). Press the third Alpha Select key (marked **UPDATE**). Next, press the **<5>** key and ***L*** will appear on the display. ("L" is the third letter on Key 5, which corresponds to the position of the solid square on the third Alpha Select key. **The corresponding positions of the solid blue squares on the 3 Alpha Select keys and the letters on the 10 alpha-numeric keys apply throughout Alpha Display set up procedures.**) Now, press the first Alpha Select key (marked **YES**). Then press the **<2>** key; ***A*** will appear on the display. Again, press the first Alpha Select key, then the **<6>** key; ***M*** will appear. Press the first Alpha Select key once more, then the **<7>** key; ***P*** will appear. When all of the correct information has appeared on the display, press the **<ENTER>** key. From now on, when you give the voice command "**Lamp**," ***LAMP*** will appear on the display instead of ***DEVICE 1***.

NOTE: ANY TIME YOU MAKE A MISTAKE, SIMPLY PRESS THE **<SEL/CANC>** KEY AND THE DISPLAY WILL GO BLANK. YOU MAY THEN BEGIN AGAIN. THE PROCEDURE FOR CHANGING INFORMATION THAT APPEARS

ON THE DISPLAY PANEL MAY BE USED FOR ALL OF THE DEVICES ON YOUR SET UP FORM, AND THE 16 TELEPHONE NUMBERS IN THE STORE PHONE NUMBER SECTION.

NOTE: TO USE A SPACE, PRESS THE FIRST ALPHA SELECT KEY (MARKED **YES**), THEN THE **0** FOR **OPERATOR** KEY. FOR AN ASTERISK (*), PRESS THE SECOND ALPHA SELECT KEY (MARKED **NO**), THEN THE **0** FOR **OPERATOR** KEY. FOR THE POUND SIGN (#), PRESS THE THIRD ALPHA SELECT KEY (MARKED **UPDATE**), THEN THE **0** FOR **OPERATOR** KEY.

We will now explain the steps for **"naming" telephone numbers**.

1. Following the instructions in Section 9.6.2, press the appropriate keys until ***IS: NAME# 1*** appears, then press the **<SEL/CANC>** key.

2. ***IS:** * now appears. You may use letters and numbers to enter your selection. In this example we will enter the word "Police." Following the same procedure used above to spell "lamp," press the appropriate Alpha Select keys to spell "Police." When ***POLICE*** appears on the display, press the **<ENTER>** key. If you make a mistake and wish to begin again, press the **<SEL/CANC>** key and enter the correct letters.

3. When you have entered the word correctly, follow the remaining instructions in the appropriate section to set up the next telephone number or device you want to appear by **name** on the display. Press the **<MENU>** key to return to the top of the main menu of your system.

12.6 VOICE RESPONSES

Your Series II system comes with its own "personality," a male voice and 13 appropriate responses. We refer to this as its **"Prestored Voice."** The **Response** portion of your system includes the following 13 words from which it will randomly select an appropriate response:

1. Hello
2. May I help you?
3. Yes Master
4. Did you call?
5. Good night
6. Good morning
7. OK
8. OK, Master
9. Right away
10. As you wish
11. I'm sorry
12. Please forgive me Master
13. Please repeat

You may change your system's voice and responses any time you wish without losing its original voice and responses. We refer to the voice and responses **you** enter as his **"Trained Voice"** (AVAILABLE WITH TRAINABLE VOICE CARTRIDGE ONLY) Let's assume you have given your system a female voice, but would like to use the prestored male voice temporarily. You would go into the ***RESPONSE SECTION*** section of the menu and select the ***PRESTORED VOICE*** choice, and the system would again be able to use the original male voice. The female voice that you have entered yourself will **not** be lost, and may be re-used at any time by going to the menu selection, ***TRAINED VOICE***. As you can see, you can give the system a dual personality at the press of a button.

If you choose to change its voice and responses, please follow these recommendations:

1. For better clarity and sound, use an external microphone in the external microphone jack on the back of the unit (Figure 3-2).

2. Check the above prestored responses and then, write a similar response next to each one you would like your Series II system to say. Each of your responses

should be limited to less than 1 second, if possible; this will give you an optimal amount and variety of responses.

12.7 RESPONSE-TYPE

Your unit has the ability to respond to the different users with there own separate voice response or personality. For example, a man may want a female voice response, while the female of the house may want a male voice response.
Voice responses of the alarm and audible timers will respond with user #1's response type.

Proceed with the following steps to choose the response type you wish the system to make:

1. Starting with ***OPERATIONS*** on the display panel, press the **<SEL/CANC>** key until ***RESPONSE SECTION*** appears; press the **<ENTER>** key.

2. Press the **<SEL/CANC>** key until the display shows ***RESPONSE TYPE***; press the **<ENTER>** key.

3. ***USER 1*** appears. This means that User 1 is the person for which voice response type is going to be selected. If you are User 1, press the **<ENTER>** key. If you are User 2, press the **<SEL/CANC>** key until your User number appears, then press the **<ENTER>** key to choose this part of the menu.

4. ***PRESTORED VOICE*** appears. Your system is asking if you want to use the prestored voice that comes with the unit. If that is your choice, you would press the **<ENTER>** key. You also have the option to:

   a. Enter the **TRAIN SECTION** where you may enter your own responses. To do this, press the **<SEL/CANC>** key until ***TRAINED VOICE*** appears on the display; then press the **<ENTER>** key.

NOTE: TRAINABLE VOICE CARTRIDGE IS OPTIONAL.

   b. Select a different voice from the prestored voice or your own. Press the **<SEL/CANC>** key and ***VOICE-CARTRIDGE*** will appear. This allows the option of ordering custom celebrity or foreign voice cartridges for your system.

   c. To have no response, or a "silent" Series II home automation system do the following: Press the **<SEL/CANC>** key until ***NO RESPONSE*** appears on the display; press the **<ENTER>** key. If this selection is made when in the Voice Control mode, your system **WILL NOT verbally respond to you; however, all commands will be performed as usual.**

12.8 CHECK A WORD

If you wish to check any response in your system, whether from the **Prestored Voice** or from the **Trained Voice** you've entered yourself, follow these steps:

1. Starting with ***OPERATIONS*** on the display, press the **<SEL/CANC>** key until ***RESPONSE SECTION*** appears; press the **<ENTER>** key.

2. ***CHANGE & CHECK*** is now displayed. Press the **<SEL/CANC>** key until ***CHECK A WORD*** appears; press the **<ENTER>** key.

3. The display now shows ***CHECK WORD#*.** What word do you want to hear the Series II home automation system speak? Press the

appropriate key (Word #1 would be the **<1>** key, Word #2 the **<2>** key, etc.). Then press the **<ENTER>** key to hear the word. Follow this procedure for each word you want to hear. When you have heard all the words you want to check, simply press the **<MENU>** key to return to the top of the menu.

12.9 RECEIVE COMPUTER COMMANDS

To have the Series II home automation system respond to ASCII codes from a computer and operate devices, it's necessary for the Series II home automation system to receive ASCII codes from your application programs in the following manner:

1) Send a single byte with the value of 1 to 64 = a one second toggle of that device number from the Series II home automation system device library.

EXAMPLE: To activate device 9 for one second (from a computer or other ASCII transmission device) send the byte value 9 by itself.

2) To control one of the 96 devices in the Series II home automation system you must send 3 bytes of information. Byte (1)=242 + byte (2)=device code (1-64) + byte (3)=one of the keyboard commands.

EXAMPLE: To DIM device 44 (a lamp) send the following bytes:
byte (1)= 242, byte (2)= 44 (for device 44 in the Series II home automation system), byte (3)= 6 (command code for Dim*)

3) To control one of the 256 X-10 devices from the Series II home automation system, send byte (1)=246, byte (2)=code A-P (1-16), byte (3)= Unit codes (1-16)+command code (on,off,bright, etc.*)

EXAMPLE: To DIM house code B, unit code 12 (a lamp), send the following byte codes: byte 246, byte 2 (for house code B) + byte 12 (for unit code 12) + command byte 6 (for Dim).

*** Command Codes:**
Code 1 = Bright, Code 2 = On, Code 3 = All On, Code 4 = Time-Out
Code 6 = Dim, Code 7 = off, Code 8 = All Off, Code 9 = Activate

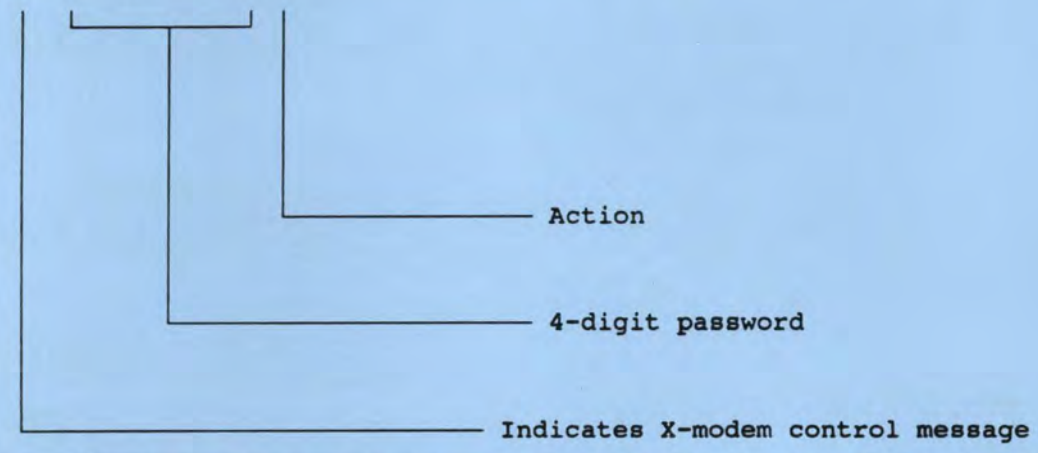
NOTE: WHEN SENDING COMPUTER COMMANDS TO THE SERIES II HOME AUTOMATION SYSTEM, IT'S BEST TO HAVE THE SENSITIVITY ON THE SERIES II HOME AUTOMATION SYSTEM TURNED OFF, BECAUSE VOICE CONTROL TAKES PRIORITY OVER COMPUTER COMMANDS. AS A RESULT, THE COMPUTER COMMAND MAY BE DELAYED.

On the back of the Series II home automation system are <u>several</u> Parallel Ports (Input/Output Ports). Please refer to Figure 3-2. It's extremely important to know the advantages and limitations of these individual interfaces because improper use can cause poor operation or damage your unit, which might void the warranty.

12.10 RS-232 REMOTE UPLOAD/DOWNLOAD INITIATION

RS-232 communications can now be initiated without using the keyboard on the Series II home automation system. The user must specify a 4-digit "Modem Control Password" in the SYSTEM SETUP section for this feature to work. The command format is to send an ASCII code of 253 decimal, followed by the 4-digit password, followed by a (1) for transfer of data to the audiomation system or, a (6) for transfer of data from the audiomation system. Upon receipt of the transfer code, the unit will enter X-modem transfer or receive mode. For example:

<253><1><2><3><4><1>



The numbers in the <>'s indicate the decimal value for a single character. Following characters must be transmitted within 1/4 second of the preceding character. X-modem transmission must begin within 10 seconds of receipt of command.

12.11 MRTA MODEM

The MRTA is a Remote Telephone Access (RTA) circuit board with many functions similar to the former RTA circuit board. In addition to the normal RTA functions, the MRTA is equipped with a 1200 baud Bell 212A compatable answer modem. The MRTA modem may be activated by an RTA command received from a remote modem. Set up and voice data may then be transformed between the remote modem and the host I.H.C. system in which the MRTA resides.

MODEM MODE: The MRTA modem mode may be activated by calling the I.H.C. system with a remote modem (or a modem on another line) and entering either the RTA command for uploading data to the I.H.C. system (i.e. 4XXXX1) or downloading data from the I.H.C. system (i.e. 4XXXX6). Note that "XXXX" is the 4-digit modem password which must be established (even if "0000")in the System Set Up portion of the I.H.C. system menu.

The calling modem must be sent to 1200 baud with MNP data compression disabled. The MRTA acts as a Bell 212A compatable answer modem at 1200 baud only! Note that during modem mode the MRTA inhibits all X-10 Receive and RTA functions. Approximately five seconds after entering a modem upload or download command the MRTA will emit a - 10dBm answer tone at a frequency of 2225 Hz. The answer tone may sound for several minutes or untill the calling modem transmits scrambled marks in high band (which usually takes a few seconds).

12.11 X-10 RECEIVE

This allows the Series II (with RTA) devices to be controlled by reception of external X-10 signals (from an X-10 Controller, Sundowner, Burglar Alarm Interface, etc.).

An X-10 TW-523 Module (optional) is used to receive the X-10 signals from the power line and input them to the AVSI Automation System. The TW-523 is connected to the Series II System via a special serial port "Y" cable (optional).

The chart on the next page shows the Device numbers and the corresponding X-10 code which controls it. Example: To have a Sundowner run a Macro at Sunset, if Device 30 is your macro, X-10 code P-8 (from the attached chart) controls Device 30, so when the Sundowner sends P-8 On Device 30 Macro will execute. If P-8 ON is sent, device 30 will be turned on, if P-8 OFF is sent, Device 30 will be turned off. In addition to ON and OFF, devices controlled by House code O (see chart) also respond to BRIGHT and DIM.

12.12 ENERGY EYE

This feature, when activated, allows for a fix period of time, any device in the system to be turned on or off by sound or motion. For example: starting after sunset you walk into a room and the lights in the room go on. You sat in the room and the lights stay on. You leave the room and the lights go off. Set up is as follows:

1. Begin by pressing the **<MENU>** key until ***OPERATIONS*** is displayed on the panel, then press the **<SEL/CANC>** key until you see ***SPECIAL OPTIONS***; press the **<ENTER>** key.

2. Press the **<SEL/CANC>** key until ***SETUP ENERGY EYE*** appears, then press the **<ENTER>** key.

3. You will now see ***MOTION ONLY***. The ENERGY EYE is now functioning when there is movement in front of the unit. Press the **<SEL/CANC>** key. You will now have several options as to the function of the Energy Eye. They are as follows:

   A) SOUND ONLY-Sound heard by the unit will cause a light to come on.

   B) SOUND OR MOTION- Sound or Movement will cause a light to come on.

   C) SOUND AND MOTION - Sound together with Movement will cause a light to come on.

   Press the **<SEL/CANC>** until the desired choice is displayed than press the **<ENTER>** key.

4. You will now see ***TURN ON***. You now have several options as to what the Energy Eye is to do. Press the **<SEL/CANC>** until the desired choice is displayed than press the **<ENTER>** key.

5. ***DEVICE 1*** is now displayed. You now may select the device you want the energy eye to control. Press the **<SEL/CANC>** and enter the desired device number and than press the **<ENTER>** key.

6. You will now see ***DURATION 5***. This is how long the light will stay on after you leave the room. The default is 5 minutes as displayed. Press the **<SEL/CANC>** and enter the desired amount of minutes than press the **<ENTER>** key.

7. ***SILENT*** is now displayed. If you want the unit to remain silent when the energy eye operates, Press the **<ENTER>**. If you want the system to speak press the **<SEL/CANC>**, ***AUDIBLE*** is displayed, press the **<ENTER>** key.

NOTE: Energy Eye may be setup as device and controlled by a timer (see section 12.1 step #5), or as a device (see section 9.4, #4:e)
ENERGY EYE MUST BE TURNED ON BEFORE IT WILL FUNCTION!

12.13 RING DEVICE

This feature, when activated, allows for a any device in the system to be turned on or off when the telephone rings.

EXAMPLE: The phone rings and the TV set is automaticly muted and then unmuted at the end of the call. To envoke this feature there are two seperate parts required.

PART 1.

1. Begin by pressing the **<MENU>** key until ***OPERATIONS*** is displayed on the panel, then press the **<SEL/CANC>** key until you see ***SPECIAL OPTIONS***; press the **<ENTER>** key.

2. Press the **<SEL/CANC>** key until ***SETUP RING DEV.*** appears, then press the **<ENTER>** key.

3. ***DEVICE # 1*** appears. If you want Device 1 to be controled when the phone rings than press the enter key. If not then press the <SEL/CANC> key. Select the desired device number then press the **<ENTER>** key.

PART 2.

1. Begin by pressing the **<MENU>** key until ***OPERATIONS*** is displayed on the panel, then press the **<SEL/CANC>** key until you see ***SPECIAL OPTIONS***; press the **<ENTER>** key.

2. Press the **<SEL/CANC>** key until ***SETUP DEVICES*** appears, then press the **<ENTER>** key.

3. ***DEVICE # ?*** appears. Select a unused device number (Example : Device # 60) then press the **<ENTER>** key. The word ***MODULE*** is displayed. Press the **<SEL/CANC>** key until ***RING DEVICE*** appears than press the **<ENTER>** key.

NOTE: Ring Device may be setup as device and controlled by a timer (see section 12.1 step #5), or as a device (see section 9.4, #4:e)
RING DEVICE MUST BE TURNED ON BEFORE IT WILL FUNCTION!

X-10 RECEIVE DEFINITION

X-10 RX CODE	CONTROLS DEVICE #	COMMANDS ACKNOWLEDGED ON/OFF	BRIGHT/DIM
O-1	1	X	X
O-2	5	X	X
O-3	9	X	X
O-4	13	X	X
O-5	17	X	X
O-6	21	X	X
O-7	25	X	X
O-8	29	X	X
O-9	43	X	X
O-10	45	X	X
O-11	47	X	X
O-12	49	X	X
O-13	51	X	X
O-14	53	X	X
O-15	55	X	X
O-16	57	X	X
P-1	2	X	
P-2	6	X	
P-3	10	X	
P-4	14	X	
P-5	18	X	
P-6	22	X	
P-7	26	X	
P-8	30	X	
P-9	44	X	
P-10	46	X	
P-11	48	X	
P-12	50	X	
P-13	52	X	
P-14	54	X	
P-15	56	X	
P-16	58	X	

SECTION 13 - INTERFACE REFERENCES

Contents

13.1 MICROPHONE JACK 100
13.2 SPEAKER JACK 100
13.3 RS-232 PORT 101
13.4 AUXILIARY PARALLEL PORTS 102
13.5 SAVING MEMORY 102
13.6 RESTORING MEMORY 103
13.7 SPECIFICATIONS 104

13.1 MICROPHONE JACK

Located on the bottom left corner is a small jack called the external microphone jack. You may put a standard mini-plug microphone jack into this port for voice input. **The type of microphone recommended is a standard self-powered electric microphone or a standard dynamic microphone.** Connecting a microphone to this jack will **disconnect the built-in microphone of your unit.**

Multiple microphones of the same type may be linked together and connected into this port, or this system may be plugged into an intercom system. However, the operation of the Series II home automation system **will be only as good as the noisiest room.** If you have a microphone in every room of the house, and in one of the rooms a stereo is turned on at very high volume, your unit will be affected by that noise and will not recognize or respond correctly, even though the other rooms are completely silent. The main purposes for the external microphone jack are:

1. If you wish to place the Series II home automation system next to a television or stereo where the noise level will be too high for the system's internal microphone to recognize your commands, you could use the external microphone jack to position another microphone in a quieter part of the room.

2. If you're going to use the Series II home automation system in an extremely noisy environment and it isn't recognizing your commands at a distance, you may use a hand-held microphone or one that hangs around your neck so it will be able to hear you.

3. If you intend to speak to the Series II home automation system as you move around your home, it may be useful to have a wireless microphone connected to your unit.

NOTE: If you have trained the Series II home automation system in Voice Control (Section 10) with one type of microphone, then switch to another type, your unit must be re-trained. If you want your unit to work through an intercom system, you **must** teach the Series II home automation system through that intercom system for proper operation. Consider that microphones are like the system's hearing aids. Each microphone will have a different kind of sound and output. Therefore, if you run multiple microphones, each should be the same type with the same impedance levels.

13.2 SPEAKER JACK

This is the jack located immediately to the right of the microphone jack. It allows you to output the sound or responses from the voice or telephone system through speakers other than the one built-in. Connections through any standard mini plug to this jack will **disconnect the system's internal speaker to the system.** The rated output for this jack is 400 milliwatt power into any standard 8 OHM speaker. If you try to connect to something which requires greater power, **you will damage the unit and void your warranty.** It's possible to connect your unit to:

1. The input of your stereo system. If you want to give the Series II home automation system a fuller or much louder sound than the capability of its internal speaker, connect it to the input of your stereo system.

2. An intercom system. When you speak to the Series II home automation system the responses will be heard throughout your home.

NOTE: IN BOTH OF THESE CASES, THE OUTPUT WOULD BE GOING INTO AN AMPLIFIER THAT WOULD DRIVE THE OTHER SPEAKERS.

13.3 RS-232 PORT

The RS-232 Port gives the Series II home automation system the ability to store and recover information to/from any standard computer (see Sections 13.5 and 13.6). It can also control computers by voice using our additional Voice Mouse Software (see Section 15.3). Following is the pinout information for this RS-232 Port; only 3 of the 9 pins are used, and the wiring must be done as if connecting computer to computer, and NOT as if connecting computer to modem.

Pin 2 is "receive" with the following electrical specifications:

a. Typical input resistance = 5.4K OHM's.
b. Expected input voltage for a logic 1 = -3 volts to -25 volts.
c. Expected input voltage for a logic 0 = +3 volts to +25 volts.

Pin 3 is "transmit" with the following electrical specifications:

a. Typical off-source resistance = 300 OHM's.
b. Output voltage for a logic 1 = -4.0 volts to -4.3 volts.
c. Output voltage for a logic 0 = +3.5 volts to +3.9 volts.

Pin 7 is "ground."

Serial Data Transfer Feature:

Hardware Lines, DB-9: 2 = RXD, 3 = TXD, 7 = GND (Series II home automation system side)
Data set: 8 Data Bits, 1 Start Bit, 1 or 2 Stop Bits, NO Parity
Baud Rates: 300, 1200, 2400, 4800
Protocol is: Standard XMODEM, Receiver driven (no other XMODEM variation, such as CRC)
Data flow control: NONE! Soft XON/XOFF is not supported and neither are any of the common hard lines used in Modem communications, such as: CTS, DTR...

What you need to upload/download Series II home automation system data:

** Any Communications Program that allows standard XMODEM data transfer.
** A Serial Data Cable that connects the Series II home automation system to your computer.
** Make sure that the Baud Rate set in the "System Setup" Menu matches the one set in your Communications Program.

What if it does not work?

** Is the cable between the two systems wired correctly?
** Are you using the correct COM port?
** Are all the settings such as Baud Rate, Data-Start-Stop Bits, and Parity configured according to Series II home automation system specifications?
** Are you using a STANDARD XMODEM?
** Does your Software depend on any hardware signals such as DTR, CTS? If yes: Check the setup in your Communications Program if these lines can be ignored, or get a cable or connector that hardwires these lines into a state suitable for your program.
** Display: both the Series II home automation system and your PC program will display the current Block and an Error count. If Errors show on either end, do not worry as long as the final result is OK (indicated by the Series II home automation system saying "HELLO"). If Errors show up more frequently (even if the data gets transferred completely), either switch to a lower Baud rate, or check your serial cable (it might have a bad connection or it's too long and loses data (high signal drop).

How to do the transfer:

** Start the sending system first, then start the receiving unit. This sequence is not required. All it does is start the transfer immediately.

13.4 AUXILIARY PARALLEL PORTS: (There are two, one is optional.)

PARALLEL PORT: The first is **NOT** a standard parallel port. It's a very specialized output port designed for use **ONLY** with special optional AVSI, INC. products, like the model #RP00, RAM PACK back-up unit (see Section 15.3). **ANY OTHER ATTACHMENT TO THIS PORT WILL DAMAGE YOUR UNIT AND VOID YOUR WARRANTY.**

ALARM JACK: (OPTIONAL) The second port is a dry-contact jack to hook up external sensors to the internal alarm circuit (allowing it to cover larger areas for security protection), such as door contacts, more infrared sensors, or panic buttons.

13.5 SAVING MEMORY

By the time you reach this part of the Owner's Guide you will have spent several hours setting up the Series II home automation system exactly the way you want it. In the event of a power failure, you have battery backup protection for up to 10 hours, if you've used the expanded battery cable attachment. Beyond that time, after a battery failure, all your training and setup would be lost. You can permanently save all the system's memory by using the "Save Memory" feature of your system, which lets you store all information (recognition, timers, vocabularies, alarm set ups, text set ups and Prestored Voice Section) on a floppy or hard disk of a host computer with any standard RS-232 port or cartridge. Following is the step-by-step procedure for doing this:

1. Be sure that the Baud rate on your host computer is set to match the same Baud rate on the Series II home automation system (see Section 9.7).

2. Using any computer with a standard RS-232 port and a standard communications package for that port, follow the connecting instructions in Section 13.3, and set the computer to the **"receive"** mode using the specifications in Section 13.3 under Communication Parameters.

3. Starting with ***OPERATIONS*** on the display panel, press the **<SEL/CANC>** key until ***SPECIAL OPTIONS*** appears; press the **<ENTER>** key.

4. Press the **<SEL/CANC>** key until ***SAVE MEMORY*** appears; press the **<ENTER>** key.

5. ***RAM PACK*** will be displayed. If you wish to save through this optional storage cartridge (Parallel Port -- see Section 15.3), proceed with step 6. If you wish to save through the RS-232 port, press the **<SEL/CANC>** key; ***RS-232*** will appear; now follow step 6.

6. Make sure your computer is in the **"receive"** mode and ready to receive information; then press the **<ENTER>** key.

7. The display panel will show "transmit" information until the transmitting has been completed. Saving through the RS-232 Port will take approximately 2 minutes. When the memory has been saved, the Series II home automation system will say **"Hello,"** and the display will show ***SET UP DEVICES***. This means

that everything in the system's memory has been stored onto your computer and may be retrieved at any time.

NOTE: WITH THIS SAVE MEMORY METHOD, IT'S POSSIBLE TO CONSIDERABLY INCREASE THE NUMBER OF USERS. FOR EXAMPLE, IN A BUSINESS OR INDUSTRY WITH DIFFERENT SHIFTS, EACH SHIFT COULD LOAD ITS RECOGNITION BEFORE STARTING WORK AND SAVE IT BACK TO A COMPUTER AT THE END OF THE WORKDAY.

13.6 RESTORING MEMORY

In the event of a total power and battery backup failure (where all recognition and storage have been lost from your system) if you have previously stored the memory onto a computer (see Section 13.5), follow these procedures to recover the lost information:

1. Be sure the Baud rate of your host computer is set to match the Baud rate in the Series II home automation system (see Section 9.7). Connect the two systems according to instructions in 13.3, RS-232 Port.

2. Starting with ***OPERATIONS*** on the display, press the **<SEL/CANC>** key until ***SPECIAL OPTIONS*** appears; then press the **<ENTER>** key.

3. Press the **<SEL/CANC>** key until ***RESTORE MEMORY*** appears; press the **<ENTER>** key.

4. ***RAM PACK*** (Parallel Port) will be displayed. If you wish to restore through the optional storage cartridge (see Section 15.3), follow step 5. If you wish to restore from the computer's RS-232 port, press the **<SEL/CANC>** key; ***RS-232*** will appear; press the **<ENTER>** key.

NOTE: DO NOT TRY TO RESTORE THROUGH THE RAM PACK IF YOU DO NOT HAVE THIS OPTIONAL EQUIPMENT. THIS WILL DAMAGE THE MEMORY AND THE SERIES II HOME AUTOMATION SYSTEM WILL NOT PROPERLY RECOGNIZE INFORMATION IN THE SYSTEM.

5. ***RECEIVE*** is now on the display; press the **<ENTER>** key.

6. The display panel will go blank and remain blank until it has received all of the information from your computer. You must be in the **"receive"** mode before you start to transmit from the computer.

7. Using your computer's communication package, set the computer into the **"transmit"** mode. Call up the file where you have stored the recognition for the Series II home automation system and transmit.

8. When ***SETUP TIMERS*** appears on the display, all of your system's memory has been restored.

NOTE: IF YOU HAVE CHANGED ANY SETTING ON THE BACK OF THE SERIES II HOME AUTOMATION SYSTEM SINCE THE MEMORY WAS SAVED, THE SYSTEM MAY NOT OPERATE PROPERLY WHEN YOU RESTORE THE MEMORY. PUT THE SETTING BACK TO ITS FORMER POSITION. FOR INSTANCE, IF YOU HAVE RAISED OR LOWERED THE SENSITIVITY LEVEL, IT MAY NEED TO BE RESET TO THE POSITION AT THE TIME THE MEMORY WAS STORED.

13.7 SPECIFICATIONS

Dimensions:
10-7/8" High x 8-3/4" Wide x 3-3/8" Deep.

Weight: 5.0 lbs.

Power Supply:
110 AC, 60 Hz, 20 watts, .2 amps.

General Information:
Number of Users: 4
Number of lamps or appliances: **42** by Voice Control; **99** by Timer; 256 by Manual Control
Number of telephone numbers: **16** per user
Number of words: approximately **83**

Operating Range (by voice): 10 to 15 feet (in "NORMAL" room noise).

Interface:
SERIAL PORT: for optional interface to computers with RS-232
PARALLEL PORT: For use with the RAM PACK backup memory system.
EXTERNAL MICROPHONE JACK: for optional input from microphones or intercom systems.
EXTERNAL SPEAKER JACK: for optional output through stereo or intercom systems.
TELEPHONE: Pulse or tone dialing. Telephone Jack and phone cord to connect to any standard RJ-11 phone jack.

Compatibility:
Compatible with the X-10 System; Radio Shack Plug'n Power; Leviton Control System; and most other carrier current control systems.

Comes with 2 modules:
1 lamp, 1 appliance

Memory Backup System:
Table Top model 5 Double AA batteries or optional 8-volt battery **(not included).**

Wall Mounted 12 volt DC 7 amp hour Battery (Alarn System Type)

SECTION 14 - SOLVING PROBLEMS

Contents

14.1 CARE AND MAINTENANCE 106
14.2 TROUBLESHOOTING 106
14.3 SYSTEM RESET 109

14.1 CARE AND MAINTENANCE

The Series II home automation system is designed to be maintenance free, but some routine cleaning and care procedures will be necessary:

1. Clean the surface with a soft cotton cloth only, never with an abrasive material. The Series II home automation system is made of highly polished plastic. Rough cloths, paper towels or any abrasive material will scratch it.

2. Cleaning substances that may be used are glass or window cleaning products, or alcohol. **Never spray the substance directly onto the plexiglass front plate;** underneath the plate is a very sensitive microphone and a speaker that could be damaged by such contact. **Damage to the microphone or speaker caused by the use of cleaning substances on the front plate will void your warranty.** Spray the liquid on a soft cotton cloth, then wipe the surface of your unit.

3. The small circle on the top front corner of the Series II home automation system is made of a polyurethane material and can be easily damaged. Behind this circle is the infrared sensor used in the intrusion detection circuit. **Use extreme caution in this area; pressing too firmly on the circle will damage the sensor and void your warranty.**

4. We recommend that you change the batteries in the battery backup section at least once every 6 months to ensure proper battery level in the event of a power failure. **Remember to use only alkaline type or equivalent batteries.**

14.2 TROUBLESHOOTING

Some situations that may seem to be problems can be easily resolved by very simple measures. Following is a selection table of things to look for **before** you call your dealer or the AVSI, INC. SERVICE CENTER for a return authorization number to send your unit in for repair.

SYMPTOM:	WHAT TO CHECK:
Display doesn't light up	Be sure power cord is plugged in. If cord is plugged in, check power to the plug.
No sound out of the speaker	1) Be sure the volume control on the back of the unit is set properly. 2) Be sure you don't have an external speaker system connected to the speaker output jack, since this will disconnect the internal speaker. 3) If you are in the No Response mode, there will be no output from the speaker. Refer to the factory-set voice section.
Microphone not functioning	1) Check to see if the red light on the front panel blinks when you whistle, snap your fingers or speak. If not, check the sensitivity control on back of the unit to be sure it's not off or at a low setting. 2) Check external microphone jack to be sure that an external microphone was not left plugged into the back of your unit. This will disconnect the internal microphone.
No response when pressing keys on keyboard	Be certain that you're not in Alarm mode and that the system is frozen due to the Alarm mode setting. Refer to Alarm Reset procedures, and try the keyboard again.
No recognition in Voice Control mode	1) Check the sensitivity level on the back of the unit and be sure it's set properly. 2) The display should be blinking slightly. If not, press the **<MENU>** key to reset the system, and then return to Voice Control to try again. 3) If the **<MENU>** key won't respond, press the **RESET** button in the battery compartment.
System jumps out of Voice Control	1) Be sure that the power cord is properly plugged into the wall. 2) Be sure that battery backup is installed properly. 3) Be sure that there are no power fluctuations on the line. This will occur if no battery backup isinstalled. 4) Add Voice Control Password in system setup.

SYMPTOM:	WHAT TO CHECK:
Alarm circuit not functioning	Move hand in front of the panel to see if the green light will blink with a 2-second delay. This is the walk-test light that may be used to check if the unit is seeing in a line of sight of about 30 to 40 feet. Be sure that nothing is blocking the circle on the top right-hand corner of the unit.
Alarm activation time	The alarm is defaulted to activate in 60-seconds; if the room is noisy, actual time could be longer. If an asterisk (*) appears on the display, your unit is hearing sounds that are slowing activation. Timing will return to normal when the room becomes quiet.
Alarm in Dialogue Check	The alarm is the only device that can be turned on during Dialogue Check. If you check the alarm vocabulary you must deactivate the alarm afterwards.
Upon power up, something other than AVSI, INC. appears on display	Return for service immediately. **DO NOT ATTEMPT TO SERVICE YOURSELF AS THIS WILL VOID THE WARRANTY.**
Devices don't respond to Voice Control, but recognition is correct	1) Enter the Manual Control mode and try manual control of the devices. 2) If they work manually, check Device Set Up section to be sure you have set up the devices with the proper House and Unit codes for the information being given in Voice Control. 3) If both the above have been checked and are working properly, make sure the device is physically turned on at its own switch.
Timer doesn't activate device as it should	1) Be sure the device was set up in the Device Set Up section of the timers so that there is a device to activate, and that you've properly set the ON time and days of the week it's supposed to work. 2) Be sure that the device is physically turned on at its switch. 3) Be sure that the clock has the proper month and day set or it will not respond properly. 4) Be sure you didn't enter today's date.

SYMPTOM:	WHAT TO CHECK:
In the teach section, the display shows "Say entry"; you comply, but it doesn't advance to the next word	You have forgotten to do the Speaker Adaption phase. Until you have done this phase you will not be able to set up any of the vocabularies in the Teach Section.
The Series II home automation system doesn't recognize commands	Give commands immediately after asterisk (*) disappears from display. Check the sensitivity control; it may be too low. You may need to update the commands; if this does not solve the problem, retrain the Series II home automation system. If it does not accept commands during the retraining, notify AVSI
Certain devices can't be controlled	This may be due to wiring in your home. Your unit must be operated on standard 110 AC current.
Keyboard is not operational	Give the Series II home automation system a verbal command. If it doesn't respond, the unit may be in the alarm mode, which makes the keyboard non-operational (unit will not respond to voice commands, either). Deactivate the alarm if this is the cause.
Default setting	Remember your unit is default set to House Code A **only** for the ALL-OFF (Good night) command.
Phone doesn't dial properly	Be sure you are in the proper phone dialing mode, pulse or touch tone. The system is defaulted to touch-tone; you may need to switch to pulse dialing. Also, make sure you have stored the name in the Store Name Section and the phone number in the Store Number Section.
Phone doesn't hang up on busy signal or dial tone, or hangs up during call	Have your phone line checked to see if the polarity is wired correctly. A polarity tester is available from most electronic stores. If polarity is incorrect, the function of this option will be impaired.
Hum or buzz in unit	Check to see if the telephone line is open; this will cause a high-pitched buzz feedback. Close the line by pressing the MENU key twice or use these voice commands: **"Entry name"** (wait for his response)/ **"Telephone"** (wait for a response and the display to show OK/NO/**"OK"**).

14.3 SYSTEM RESET

There is a possibility that your system will completely lock-up or freeze. (This may be due to black outs, brownout, or extreme wheather conditions. It is recommended putting a uninterupted power supply or a surge protector on line to protect your unit.) This means the unit does not function when you press the **<MENU>** key or does not react when you press the red reset button in the battery compartment. If this happens, it will be necessary to totally reset the system. If so, all stored recognition and memory in the Series II home automation system will be lost. This should be a very rare occurrence, but you need to know the procedure for resetting your system.

1. If your unit is using a battery backup, remove the batteries from the compartment.

2. After removing the batteries, unplug your unit and plug it in again. This will cause a total reset of your system.

3. Perform the tests in Section 5.2.

4. Reinstall the batteries, following instructions in Section 5.3.

5. Either retrain the Series II home automation system in accordance with all the pertinent instructions in this Owner's Guide or restore your hard disk backup.

SECTION 15 - RELATED INFORMATION

Contents

15.1 WHO TO CONTACT 112
15.2 GLOSSARY OF TERMS 112
15.3 ACCESSORIES 114
15.4 ORDERING INSTRUCTIONS 116

15.1 WHO TO CONTACT

FOR TECHNICAL SUPPORT - Refer to your Dealer/Distributor initially or contact AVSI at (714) 524-4488 for technical assistance regarding interfacing, start-up, applications and malfunctions. Application support personnel answer this number weekdays from 8:00 AM to 5:00 PM, Pacific Standard/Daylight Savings Time.

FOR REPAIR SERVICE - See your Service Information Guide (AVSI Owner's Guide Publication) for a Service Center, or your local dealer.

FOR ACCESSORIES - Contact your nearest dealer or call AVSI at (714) 524-4488. The AVSI Supply Center is located in Los Alamitos, California.

FOR TRAINING INFORMATION - AVSI offers scheduled classroom training and User application seminars on the **Series II home automation system**. Call (714) 524-4488.

15.2 GLOSSARY OF TERMS

AC - Alternating current.

ALPHA - Characters of the alphabet, A through Z.

A.I.R. - Artificial Intelligent Recognizer.

ASCII CODE - American Standard Communication Information Interchange. The code representation of letters, numbers, characters and special controls that all computers use to communicate with each other.

BALANCING - Equalizing the Series II home automation system with other noise in the room so the unit can operate by voice command.

BAUD RATE - The speed at which computers communicate with each other.

CARRIER CURRENT - Method used to transmit coded signals to lamp and appliance modules over existing household wiring.

CIRCUIT BREAKER - A device that automatically interrupts the flow of an electrical current.

CIRCUITRY - The electrical elements or system of the Series II home automation system.

COMMAND - Instruction given to the Series II home automation system in order for it to perform a specific task.

DEFAULT - Preset options which determine operation of the Series II home automation system, unless changed by the User.

DEVICE - Anything that the Series II home automation system can control.

DIALECT - The form of a spoken language peculiar to a region.

DISPLAY LEVEL - Level of brightness of information appearing on the system's display panel.

DISPLAY PANEL - A 16 character, alpha-numeric vacuum fluorescent display at the top front of the Series II home automation system that acts as a window to give you operating information.

FOCUS TOLERANCE - Level setting for how precisely each word must be spoken to be recognized by the Series II home automation system.

FLUORESCENT LAMP - A glass tube coated on the inside with a fluorescent substance that gives off fluorescent light when mercury vapor in the tube is acted upon by a stream of electrons.

GROUNDING - The connection of an electrical conductor with the ground.

ILLUMINATION - Supplied or brightened with light.

INCANDESCENT LAMP - A lamp with a filament in a vacuum heated to incandescence by an electrical current.

INTERFACE - The linking of one computer system or peripheral to another.

INFRARED SENSOR - Device used in the Series II home automation system to detect the heat of moving objects.

INTERMITTENTLY - Stopping and starting at intervals.

PARALLEL PORT - Input/output interface for connecting the Series II home automation system to the outside world.

MEMORY - A section of the Series II home automation system used for storing information.

MENU - List of options available for operating the Series II home automation system.

MODE - Method of operation.

MODULE - A separate unit used between a lamp or appliance and the wall receptacle to receive signals from the Series II home automation system.

PASSES - The number of times required to repeat a word in teaching the Series II home automation system.

P.I.N. - Product Identification Number used for system entry.

RS-232 PORT - Used for interfacing to computer systems.

R.T.A. - Remote Telephone Access.

SCROLL - Moving in order through the menu options to see each option on the display panel.

SENSITIVITY - The system's susceptibility to sound of a User's voice.

STORE - To record information in the system's memory.

15.3 ACCESSORIES

MODEL #RS00 - RS-232 CABLE: Allows for connection of the Series II home automation system to any computer with an RS-232 port. Uses include:

a) Downloading data from the Series II home automation system to computer so data can be stored on a floppy disk.

b) Uploading data stored on disk to the Series II home automation system in the event a power failure has caused a loss of memory in the Series II home automation system.

c) Control of home computers by voice when used in conjunction with the Voice Mouse Software.

MODEL #RS01 - RS-232 CABLE: Cable with (9-PIN) connector for computers. Description same as MODEL #RS00.

MODEL #VM00 - VOICE MOUSE SOFTWARE: Allows User to control a home computer by voice. Now available for IBM and IBM compatible computers; available soon for other types of computers.

MODEL #VM01 - SET UP PROGRAM: Data can be transferred to and from a AVSI System through your computer's serial port. The Set Up program allows you to store the data on disk, view, print and alter all the setup paramaters except the voice data and allows the direct control of any device the AVSI System can control. This program is compatible with all AVSI Systems: Butler-In-A-Box, Series II, E.C.U., and the I.H.C.

MODEL #WM01 - WIRELESS MICROPHONE (PROFESSIONAL TYPE): This is a professional quality wireless microphone. This is the recommended microphone for individuals who have difficulty in speaking above lower volume levels, though it's also an excellent microphone for persons who speak at normal volume as well. Range sufficient for any normal residence.
MODEL #SC00 - ELECTRONIC MOISTURE SENSOR: This device can either be used as a stand-alone control or in conjunction with the Series II home automation system to automatically control lawn sprinklers, drip irrigation systems, etc. It automatically turns off the water when the ground is sufficiently moist (this is adjustable), or when it rains.

MODEL #SC08 - SPC-8 SPRINKLER CONTROLLER: This devise handles up to 8 zones of watering with settings of 1-60 minutes per zone. Multiple controllers may be piggy backed adding as many zones as required.

MODEL #RP00 - RAM PACK 7000: This device allows the user to store the system's memory for up to seven years. It's a re-usable RAM-Based storage cartridge containing a built-in (and replaceable) lithium battery. The RAM Pack will store most of the information in the Series II home automation system, including the Timer Section, Telephone Number, Devices (Set- up & Text), and Voice Recognition for up to four users.

MODEL #IR00 - TELEVISION INFRARED CONTROLLER INTERFACE: Controls up to 8 infrared systems by voice, time, touch and situation in your home (TV, VCR, Cable TV, CD Player, etc...) regardless of the manufacturer.

MODEL #TC00 - THERMOSTAT CONTROLLER: Reduces fuel costs for central heating and air conditioning by automatically controlling your thermostat, even when you are asleep or away from home. Installs in minutes without touching your existing thermostat. Consists of 1 Temperature Regulator, 1 Low-Voltage Adaptor and 1 Appliance Module. The Low-Voltage Adaptor is plugged into an appliance module, controlled in turn by the Series II home automation system.

MODEL #MX00 - MAXI CONTROLLER: Allows you to control (from one convenient location) up to 16 lights and appliances throughout your home at the touch of a button. Sends signals over your existing house wiring to modules. It can DIM and BRIGHTEN lights and turn all lights ON with one button if you hear a suspicious noise at night. It can turn everything OFF with one button when you go to bed. This is a stand-alone accessory; no attachment to the Series II home automation system is necessary.

* * * * * RELATED INFORMATION * * * * *

MODEL #LM00 - LAMP MODULE: Turns lights on and off anywhere in the house by remote control. Responds to ALL LIGHTS ON, BRIGHT and DIM commands. Maximum rating: 300W; incandescent lamps only.

MODEL #AM00 - APPLIANCE MODULE (2-PIN): Turns appliances on and off anywhere in the house by remote control. Does **not** respond to ALL LIGHTS ON, BRIGHT or DIM commands. Maximum rating: 15A. resistive, 500W lamps, 1/3 H.P. motors. **(NOTE:** 220 modules are also available.)

MODEL #AM03 - APPLIANCE MODULE (3-PIN): Turns appliances on and off anywhere in the house by remote control. Does **not** respond to ALL LIGHTS ON, BRIGHT or DIM commands. Maximum rating: 15A. resistive, 500W lamps, 1/3 H.P. motors.

MODEL #WS00 - WALL SWITCH MODULE: Replaces existing wall switch. Turns any wall switch-operated light on or off anywhere inside or outside the house. Responds to ALL LIGHTS ON, BRIGHT and DIM commands. Maximum rating: 500W, incandescent lights only.

MODEL #WS03 - 3-WAY WALL SWITCH SET: Controls lights operated by two switches. Maximum rating: 500W, incandescent lights only.

MODEL #WR00 - WALL RECEPTACLE MODULE: Replaces existing wall receptacle. Turns lights and appliances on and off by remote control. Does **not** respond to ALL LIGHTS ON, BRIGHT or DIM in commands. Maximum rating: 15A. unconditional.

MODEL #AB00 - AUXILIARY BATTERY CABLE: Allows User to increase amount of battery use in the Wireless Microphone (WM01). Allows for a gell-cell battery to be used.

MODEL #AB01 - AUXILIARY BATTERY CABLE EXTENSION: For extra time, an extension can be added to AB00 for use on a 12-volt wheelchair battery.

MODEL #AM01 - DRY-CONTACT CLOSURE MODULE: Activates any device requiring a push-button or dry contact module, i.e., to open/close garage door; to raise/lower motorized bed; alarm interfacing to control panel or communication devices. Handles up to 20 amps of current.

MODEL #HD15 - HEAVY DUTY 220V 15A APPLIANCE MODULE: (Split-phase systems only.) Maximum rating: 15A. unconditional.

MODEL #HD20 - HEAVY DUTY 220V 20A APPLIANCE MODULE: (Split-phase systems only.) Maximum rating: 20A. unconditional.

MODEL #AS00 - ALARM SIREN: Loud, shrieking-type alarm signal the Series II home automation system can activate in conjunction with the Intrusion Detection System. Used with #AM00.

MODEL #HR00 - HAND-HELD REMOTE CONTROL SYSTEM: Controls up to a total of 16 lights and appliances from inside or outside your home, including from your car. Includes 1 transceiver/appliance module and 1 remote control transmitter. This is a stand-alone product; no attachment to the Series II home automation system is necessary.

MODEL #RCT0 - REMOTE CONTROL TRANSMITTER: Controls anything in your system from any room in the house. This is a stand-alone product, which can be wall-mounted, if you wish.

15.4 ORDERING INSTRUCTIONS

To order accessories for the Series II home automation system, contact your nearest dealer or distributor. If you don't know the nearest dealer or distributor, call AVSI at (714) 524-

4488 and we will have the nearest dealer get in contact with you. You may also write to us at:

AVSI
17059 El Cajon Ave.
Yorba Linda, CA 92686
Attention: Customer Service
Phone: (714) 524-4488
Fax: (714) 996-1127

SYSTEM MENU DESCRIPTIONS

****

OPERATIONS

VOICE CONTROL: Control of any device by voice command.
MANUAL CONTROL: Control of any device by use of keyboard.
PHONE DIALER: Manually dial phone using keyboard.

LEARNING SECTION

VOICE TRAIN: Contains menu items used to teach Series II home automation system words.
CHECK AND LEARN: Verify and improve the system's word recognition.
CHANGE A WORD: Change or add words to the system.
DELETE A WORD: Erase a word from the system's memory.
TEACH SECTION: Teach and store voice recognition vocabularies.
DIALOGUE CHECK: Check Voice Control without activating devices.
USER CHECK: Verify that the Series II home automation system can properly identify each User.

VOICE SETUP: Contains menu items to prepare for Train Section.
SPEAKER ADAPTION: Allows Series II home automation system to learn the User's voice.
MICROPHONE CHECK: Check if voice is loud enough for the system.
SET FOCUS: Set how precisely the user must speak to be understood.
TIGHT ON ENTRYWD: Adds additional security for the entry word.
DELETE A USER: Erase User from Series II home automation system's memory.
SET PASS, 1 OR 2: Saying words once or twice when teaching system.
AUTO UPDATE: Allows for automatic CHECK & LEARN in VOICE CONTROL.
SHORT FORM: Allows for a 2-word command operation in VOICE CONTROL. Enables Auto Reverse
SET USER NAMES: Change User from a number to a name on display.
SET CHECK & LEARN: From update by keyboard to update by voice.
SET USER NAMES: Change User from a number to a name on display.
SET CHECK & LEARN: From update by keyboard to update by voice.
FAST ANSWER: Set Unit to answer by only calling unit's name.

SPECIAL OPTIONS

SET UP DEVICES: Set up device library for control through any 4 modes.
SET UP MACROS: Storage device for multi-operations.
SET UP ENERGY EYE: Sound or motion control of an object.
SAVE MEMORY: Store the system's memory onto a computer.
RESTORE MEMORY: Retrieve the system's stored memory from a computer.
SET UP ALARM: Operate the system's Intrusion Detection System.
RING DEVICE: Unit can mute TV or turn on a light when the phone rings.

RESPONSE SECTION

CHANGE & CHECK: Train a voice cartridge (optional accessory)
CHECK A WORD: Hear or play back a voice response.
DELETE A WORD: Remove a word from cartridge.
RESPONSE TYPE: Change from the pre-stored voice, voice cartridge or no voice.

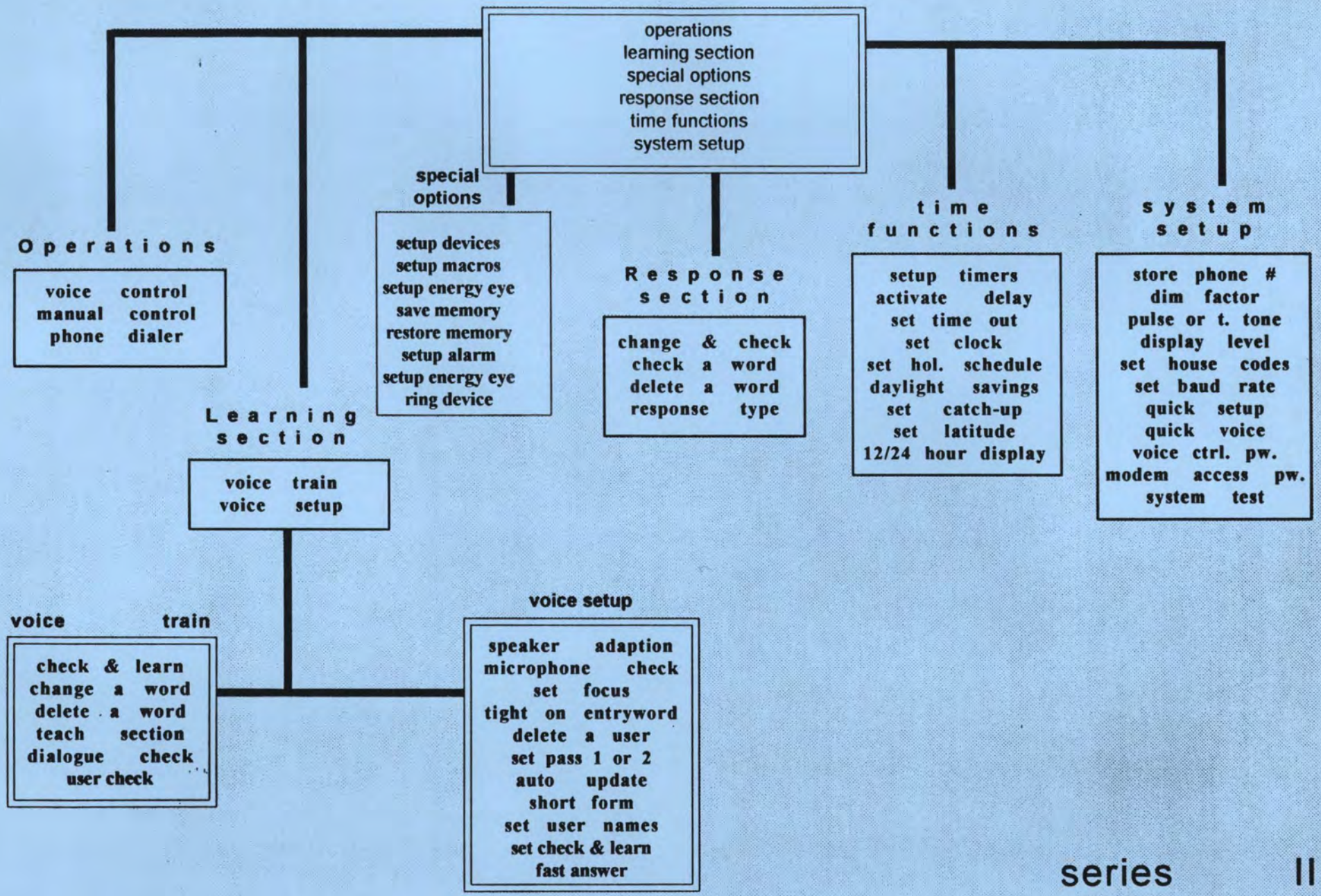
***** RELATED INFORMATION *****

TIME FUNCTIONS

SET UP TIMERS: Set up devices to operate automatically by timer.
ACTIVATE DELAY: 0 to 99 seconds on/off toggle. (Similar to holding down push button control.)
SET TIME OUT: 0 to 59 minutes on/off toggle. (Similar to "snooze" on an alarm clock.)
SET CLOCK: Set the current time, date and day of the week.
SET HOL SCHEDULE: Set holiday dates and ranges.
DAYLIGHT SAVINGS: Optional auto adjust for daylight savings.
SET CATCH UP: After power failure "go back" in time and reset timers.
SET LATITUDE: Used for tracking sunrise or sunset.
12/24 HOUR DISPLAY: 12-hr. AM/PM or 24-hr. military time displayed.

SYSTEM SET UP

STORE PHONE #: Store telephone numbers to be dialed upon command.
DIM FACTOR: Dim a lamp to a predetermined preference.
PULSE OR T. TONE: Methods of telephone dialing.
DISPLAY LEVEL: Set brightness level of display.
SET HOUSE CODES: Code to identify devices set up in system. Reacting to **"ALL ON"** or **"ALL OFF"** command.
SET BAUD RATE: Speed of communication from Series II home automation system to a computer.
QUICK SETUP: Auto scrolling through menus to aid in system start.
QUICK VOICE: Auto scrolling in VOICE menus to aid in voice training.
VOICE CTL. PW.: Voice control password to exit from voice control to menu.
MODEM ACCESS P.W.: Password to allow access to the Series II home automation system by modem.
SYSTEM TEST: Verify that circuitry and memory function properly.


operations
learning section
special options
response section
time functions
system setup
Operations
voice control
manual control
phone dialer
special options
setup devices
setup macros
setup energy eye
save memory
restore memory
setup alarm
setup energy eye
ring device
Response section
change & check
check a word
delete a word
response type
time functions
setup timers
activate delay
set time out
set clock
set hol. schedule
daylight savings
set catch-up
set latitude
12/24 hour display
system setup
store phone #
dim factor
pulse or t. tone
display level
set house codes
set baud rate
quick setup
quick voice
voice ctrl. pw.
modem access pw.
system test
Learning section
voice train
voice setup
voice
train
check & learn
change a word
delete a word
teach section
dialogue check
user check
voice setup
speaker adaption
microphone check
set focus
tight on entryword
delete a user
set pass 1 or 2
auto update
short form
set user names
set check & learn
fast answer

series II

SET UP FORM FOR VOCABULARIES

COMMANDS

1 (Entry) _____

2 (Kill Word) _____

3 No _____

4 On _____

5 Turn Off _____

6 Activate _____

7 Time-out _____

8 Good Night _____

9 Dim _____

10 Brighter _____

11 Lights On _____

ALARM

No _____

On _____

Off Please _____

Password _____

TELEPHONE

No _____

OK _____

Call Waiting _____

1 Name _____

2 Name _____

3 Name _____

4 Name _____

5 Name _____

6 Name _____

7 Name _____

8 Name _____

9 Name _____

10 Name _____

11 Name _____

12 Name _____

13 Name _____

14 Name _____

15 Name _____

16 Name _____

DEVICES

No _____

Alarm _____

Telephone _____

Auxiliary _____

Device 1 _____

Device 2 _____

Device 3 _____

Device 4 _____

Device 5 _____

Device 6 _____

Device 7 _____

Device 8 _____

Device 9 _____

Device 10 _____

Device 11 _____

Device 12 _____

Device 13 _____

Device 14 _____

Device 15 _____

Device 16 _____

Device 17 _____

Device 18 _____

Device 19 _____

Device 20 _____

Device 21 _____

Device 22 _____

Device 23 _____

Device 24 _____

Device 25 _____

Device 26 _____

Device 27 _____

Device 28 _____

Device 29 _____

Device 30 _____

Device 31 _____

Device 32 _____

AUX DEVICES

Aux Device 1 _____

Aux Device 2 _____

Aux Device 3 _____

Aux Device 4 _____

Aux Device 5 _____

Aux Device 6 _____

Aux Device 7 _____

Aux Device 8 _____

Aux Device 9 _____

Aux Device 10 _____

DEVICE SETUP FORM

	DEVICE NAME	(DEFAULT)	TYPE	HOUSE CODE	UNIT CODE	ACTIVATE DELAY
Device 1		A-1				
Device 2		A-2				
Device 3		A-3				
Device 4		A-4				
Device 5		A-5				
Device 6		A-6				
Device 7		A-7				
Device 8		A-8				
Device 9		A-9				
Device 10		A-10				
Device 11		A-11				
Device 12		A-12				
Device 13		A-13				
Device 14		A-14				
Device 15		A-15				
Device 16		A-16				
Device 17		B-1				
Device 18		B-2				
Device 19		B-3				
Device 20		B-4				
Device 21		B-5				
Device 22		B-6				
Device 23		B-7				
Device 24		B-8				
Device 25		B-9				
Device 26		B-10				
Device 27		B-11				
Device 28		B-12				
Device 29		B-13				
Device 30		B-14				
Device 31		B-15				
Device 32		B-16				

DEVICE SETUP FORM

	DEVICE NAME	(DEFAULT)	TYPE	HOUSE CODE	UNIT CODE	ACTIVATE DELAY
Device 65		E-1				
Device 66		E-2				
Device 67		E-3				
Device 68		E-4				
Device 69		E-5				
Device 70		E-6				
Device 71		E-7				
Device 72		E-8				
Device 73		E-9				
Device 74		E-10				
Device 75		E-11				
Device 76		E-12				
Device 77		E-13				
Device 78		E-14				
Device 79		E-15				
Device 80		E-16				
Device 81		F-1				
Device 82		F-2				
Device 83		F-3				
Device 84		F-4				
Device 85		F-5				
Device 86		F-6				
Device 87		F-7				
Device 88		F-8				
Device 89		F-9				
Device 90		F-10				
Device 91		F-11				
Device 92		F-12				
Device 93		F-13				
Device 94		F-14				
Device 95		F-15				
Device 96		F-16				

macro chart

	name: macro 1		name: macro 2		name: macro 3		name: macro 4		name: macro 5		name: macro 6	
	device number	*device action*	*device number*	*device action*	*device number*	*device action*	*device number*	*device action*	*device number*	*device action*	*device number*	*device action*
position number 1												
position number 2												
positon number 3												
position number 4												
position number 5												
positon number 6												
position number 7												
positon number 8												
position number 9												
position number 10												
position number 11												
postion number 12												
positon number 13												
position number 14												
positon number 15												
position number 16												
notes:												

© 1993 Mastervoice, Inc.

MASTERVOICE

macro chart

	name: macro 7		name: macro 8		name: macro 9		name: macro 10		name: macro 11		name: macro 12	
	device number	*device action*	*device number*	*device action*	*device number*	*device action*	*device number*	*device action*	*device number*	*device action*	*device number*	*device action*
position number 1												
position number 2												
positon number 3												
position number 4												
position number 5												
positon number 6												
position number 7												
positon number 8												
position number 9												
position number 10												
position number 11												
postion number 12												
positon number 13												
position number 14												
positon number 15												
position number 16												
notes:												

© 1993 Mastervoice, Inc.

VOICE

macro chart

	macro 13		macro 14		macro 15		macro 16	
	device number	*device action*	*device number*	*device action*	*device number*	*device action*	*device number*	*device action*
position number 1								
position number 2								
positon number 3								
position number 4								
position number 5								
positon number 6								
position number 7								
positon number 8								
position number 9								
position number 10								
position number 11								
postion number 12								
positon number 13								
position number 14								
positon number 15								
position number 16								

notes:

© 1993 Mastervoice, Inc.

MASTERVOICE

timers

#	type	special timers		com	Enable/Disable	life span: start date / stop date	life span: on/off time	on options: tracking	on options: security	on options: if device	off options: tracking	off options: security	off options: if device	device #	day of week	holiday schedule
1	normal interval special	1 2 3 4 last week re-occur all weeks	don't alternate alternate begin next time	on off bright dim lon aof		from: to:	on: off:	no tracking track sunrise track sunset	notrandom random	device #: excuteifon excuteifoff	no tracking track sunrise track sunset	notrandom random	device #: excuteifon excuteifoff		S M T W T F S	ignore holi only holi not on holi
2	normal interval special	1 2 3 4 last week re-occur all weeks	don't alternate alternate begin next time	on off bright dim lon aof		from: to:	on: off:	no tracking track sunrise track sunset	notrandom random	device #: excuteifon excuteifoff	no tracking track sunrise track sunset	notrandom random	device #: excuteifon excuteifoff		S M T W T F S	ignore holi only holi not on holi
3	normal interval special	1 2 3 4 last week re-occur all weeks	don't alternate alternate begin next time	on off bright dim lon aof		from: to:	on: off:	no tracking track sunrise track sunset	notrandom random	device #: excuteifon excuteifoff	no tracking track sunrise track sunset	notrandom random	device #: excuteifon excuteifoff		S M T W T F S	ignore holi only holi not on holi
4	normal interval special	1 2 3 4 last week re-occur all weeks	don't alternate alternate begin next time	on off bright dim lon aof		from: to:	on: off:	no tracking track sunrise track sunset	notrandom random	device #: excuteifon excuteifoff	no tracking track sunrise track sunset	notrandom random	device #: excuteifon excuteifoff		S M T W T F S	ignore holi only holi not on holi
5	normal interval special	1 2 3 4 last week re-occur all weeks	don't alternate alternate begin next time	on off bright dim lon aof		from: to:	on: off:	no tracking track sunrise track sunset	notrandom random	device #: excuteifon excuteifoff	no tracking track sunrise track sunset	notrandom random	device #: excuteifon excuteifoff		S M T W T F S	ignore holi only holi not on holi
6	normal interval special	1 2 3 4 last week re-occur all weeks	don't alternate alternate begin next time	on off bright dim lon aof		from: to:	on: off:	no tracking track sunrise track sunset	notrandom random	device #: excuteifon excuteifoff	no tracking track sunrise track sunset	notrandom random	device #: excuteifon excuteifoff		S M T W T F S	ignore holi only holi not on holi
7	normal interval special	1 2 3 4 last week re-occur all weeks	don't alternate alternate begin next time	on off bright dim lon aof		from: to:	on: off:	no tracking track sunrise track sunset	notrandom random	device #: excuteifon excuteifoff	no tracking track sunrise track sunset	notrandom random	device #: excuteifon excuteifoff		S M T W T F S	ignore holi only holi not on holi
8	normal interval special	1 2 3 4 last week re-occur all weeks	don't alternate alternate begin next time	on off bright dim lon aof		from: to:	on: off:	no tracking track sunrise track sunset	notrandom random	device #: excuteifon excuteifoff	no tracking track sunrise track sunset	notrandom random	device #: excuteifon excuteifoff		S M T W T F S	ignore holi only holi not on holi

© Mastervoice, Inc.

t i m e r s

	function	life span				device reference		
	timer action	*start date*	*stop date*	*on time*	*off time*	*device number & description*	*day of week*	*silent*
timer number 1							S M T W T F S	yes no
timer number 2							S M T W T F S	yes no
timer number 3							S M T W T F S	yes no
timer number 4							S M T W T F S	yes no
timer number 5							S M T W T F S	yes no
timer number 6							S M T W T F S	yes no
timer number 7							S M T W T F S	yes no
timer number 8							S M T W T F S	yes no
timer number 9							S M T W T F S	yes no
timer number 10							S M T W T F S	yes no
timer number 11							S M T W T F S	yes no
timer number 12							S M T W T F S	yes no
timer number 13							S M T W T F S	yes no
timer number 14							S M T W T F S	yes no
timer number 15							S M T W T F S	yes no
timer number 16							S M T W T F S	yes no
timer number 17							S M T W T F S	yes no
timer number 18							S M T W T F S	yes no
timer number 19							S M T W T F S	yes no
timer number 20							S M T W T F S	yes no
timer number 21							S M T W T F S	yes no

© 1993 Mastervoice, Inc.

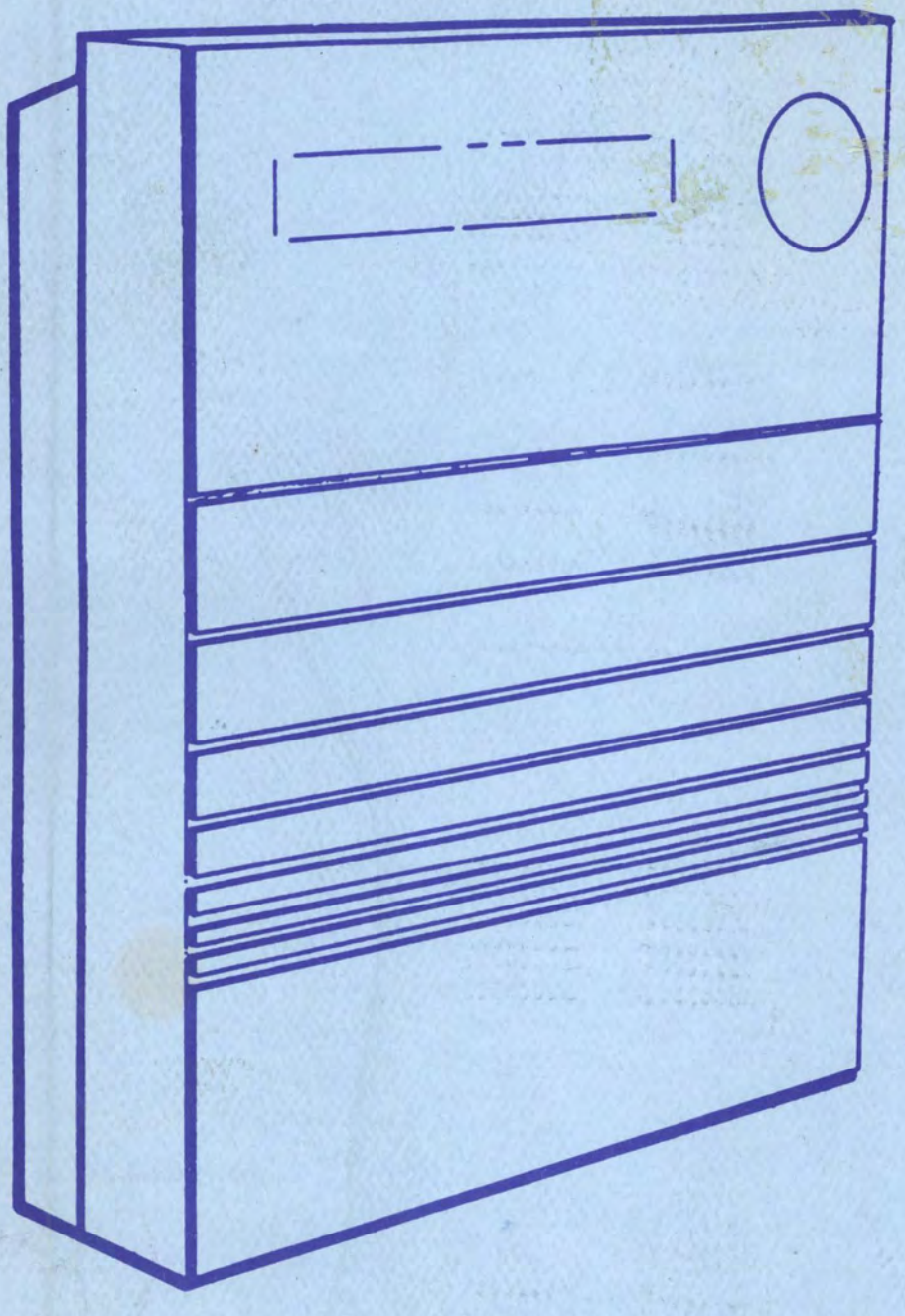
MASTERVOICE

t i m e r s

	function	life span				device reference		
	timer action	*start date*	*stop date*	*on time*	*off time*	*device number & description*	*day of week*	*silent*
timer number 22							S M T W T F S	yes no
timer number 23							S M T W T F S	yes no
timer number 24							S M T W T F S	yes no
timer number 25							S M T W T F S	yes no
timer number 26							S M T W T F S	yes no
timer number 27							S M T W T F S	yes no
timer number 28							S M T W T F S	yes no
timer number 29							S M T W T F S	yes no
timer number 30							S M T W T F S	yes no
timer number 31							S M T W T F S	yes no
timer number 32							S M T W T F S	yes no
							S M T W T F S	yes no
							S M T W T F S	yes no
							S M T W T F S	yes no
							S M T W T F S	yes no
							S M T W T F S	yes no
							S M T W T F S	yes no
							S M T W T F S	yes no
							S M T W T F S	yes no
							S M T W T F S	yes no
							S M T W T F S	yes no

© 1993 Mastervoice, Inc.

MASTERVOICE



Series II

MASTERVOICE

OWNER'S GUIDE